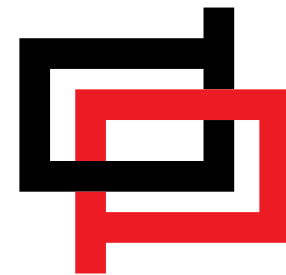


**Enterprise  
Management System  
DeloPro 4.0**



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# Purpose

**DeloPro 4.0** System (hereinafter referred to as the “ System”) is a complex ERP-solution, which is based on the modern concepts of conducting the business – CRM (customer relationship management), SCM (supply chain management), DCM (demand chains management), HRM (human resource management), BPM (business process management), and electronic commerce (B2B).

The system is intended for management of sales, purchases and production, finance, marketing, projects, inventory, motor transport and cargo delivery, personnel and customer relationships, business processes and document circulation. The system comprises e-mail and organizer, corporate information portal as well as BI means – programmable dashboards, balanced scorecards, and multidimensional reports. Its employment enables to conduct merchandising accounting and pricing, taxation and management accounting,

budgeting and financial analysis.

The system is realized on the basis of **WEB-technologies** (three-tier client-server architecture with the thin client WEB-browser) installed in one place – on a WEB-server, and is platform-independent.

Accounting of economic activity of the companies with the geographically dispersed structure (branches, remote platforms and warehouses, shops and sales outlets) and several businesses is conducted on-line in the common database. It ideally meets the needs of corporations and holding companies. The system permits to consolidate the data concerning various aspects of their activity and to represent them in the required analytical cuts. Number of corporation members, which conducts the accounting, and simultaneously working users is limited only to the capabilities of the database servers.

In accordance with their role in the company business processes, users shall be provided with the personified access to the System functionality from any point on the globe via Internet network. The advanced business logic, access management to the system functions and objects for the users and corporation members allows for organization of the effective work in the common information field with the clients, partners, and suppliers.

The system is flexibly adjustable and allows for automation of the business processes across the whole added value creation chain. Various target groups of users (proprietors, enterprise's department heads and employees) have access to the powerful tools of interactive business analytics that provide operating information for the solution-making process.

# Positioning

**DeloPro 4.0** System is the comprehensive solution for business management. The system is focused on small and medium-sized companies, which are engaged in the business of distribution and wholesale trade, retail network, job order production, service (provision of various types of services), system integration, project management in various spheres.

The primary clients' base is the dynamically growing companies, which are identified by:

- The wide product range (few to hundreds of thousands of items),
- Export-import transactions, comprehensive supply schemes;
- The branched out dealer network and sales representatives in the regions;
- Teams of the sales representatives, mobile trade;
- Own retail network;
- Servicing of the trading networks and customers offices;
- Commodities delivery with employment of own or rented motor transportation means;
- Elaborate merchandising accounting (consumer properties, analogous commodities, complete set commodities, full line of commodities, etc.), pricing and logistics;
- Considerable commodity turnover, need in efficient inventory management;

- Inventory accounting with fixation of the respective commodity storage facilities, recording of the commodity lots properties, useful lives, certificates, tracking of the commodity serial numbers history, etc.

The price and license policy, implementation of well-tested technology in the System implementation project management and highly qualified consultants permit to resolve the clients' problems in the shortest practicable time at the reasonable functional-price-quality ratio.

# Benefits of implementation

**DeloPro 4.0** System implementation is the investment into the tool and technology of the company operational and strategic management facilitating transparency, controllability, and efficiency of the business for its proprietors.

## Transparency

- Management of the monetary, commodity, information, and documentary flows of geographically dispersed corporation is conducted in the real time mode in the common database from any point on the globe;
- The system permits to evaluate the real cost of business, break down the assets and liabilities structure, and calculate key performance indicator values.

## Controllability

- The control of the operational logistics cycle across the whole added value creation chain shall facilitate increase of the orders implementation speed and minimization of errors;
- Business processes management, personification of responsibility and monitoring of the users activity, and effective system of the personnel motivation shall provide for successful realization of the adopted decisions.

## Efficiency

- Utilization of the marginal income, inventory turnover and profitability of the investments as the key performance

indicators of profit centers activity enables to use the flat management structure and to achieve considerable increase of the company profit;

- Client-oriented business strategy improves loyalty of the clients that leads to growth of the sales volumes;
- Minimization of commodity inventory with use of the dynamic buffers management by the theory of constraints methodology (Theory of Constraints, TOC), operating administration of debtors, and tax optimization of the corporation expenses as a whole shall facilitate lowering costs of doing the business.

# Key competitive advantages of DeloPro 4.0 System

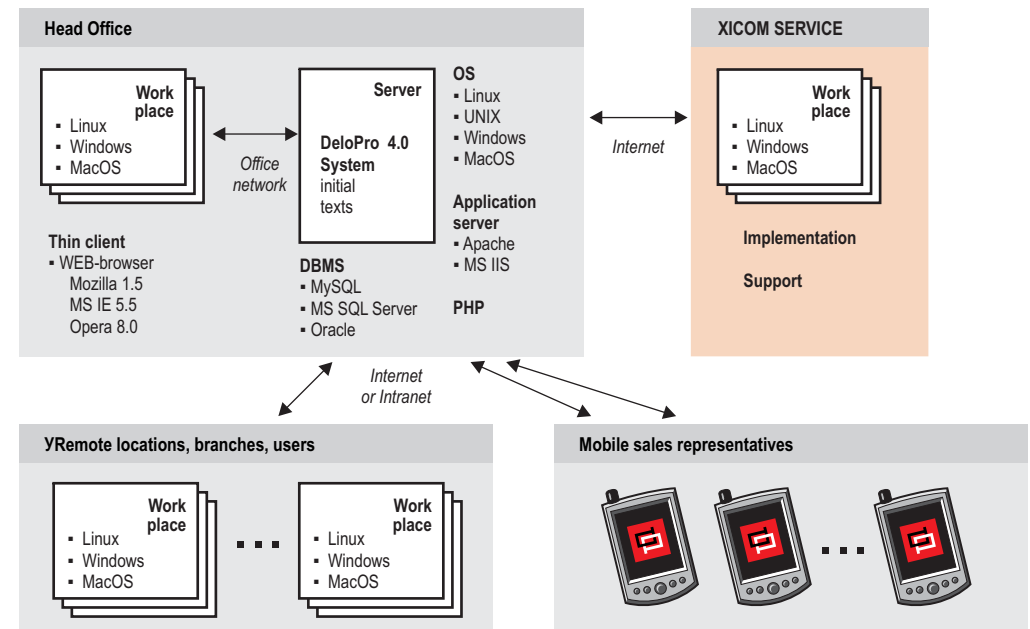
The system combines technological effectiveness, flexibility, adaptability, and the developed functionality at quite low total cost of ownership for satisfaction of the enterprise information requirements in continuously changing business environment and growing degree of individualization of the services provision and commodity production.

## Advantages of technology and architecture

**Operation of the corporation with geographically dispersed structure in the common database.** On-line access via Internet or Intranet network as well as by means of the dial-up or leased lines.

### Platform independence (multiplatform structure).

Operational system at the workplaces – MS Windows, Mac OS, Unix, Linux, etc. The thin client – Internet Explorer, Mozilla, Opera or Safari. Application server – MS IIS, Apache, etc. DBMS – MS SQL Server, MySQL, Oracle and others.



**High safety of data.** While using a three-tier architecture, the client-server user has no access to SQL-server passwords. In the course of working via Internet network it uses the SSL-protocol (128-bit traffic encryption).

**Simplicity of scaling.** The program is installed only on the server. When need arises, computing capabilities are increased in one place. Addition of the System new users and corporation members, which conduct the accounting, does not require

additional expenses in the form of payments under the license agreement and investments about the IT Infrastructure.

**Simplicity of service.** There is no need in personnel for maintenance of the System working capabilities in the remote divisions. Scheduled updating is made by way of downloading of the modified texts from WEB-site of the developer.

**Remote on-line support by the developer.** In order to facilitate

prompt identification and resolution of the possible incidents (error, questions, difficulties) while working with the program, the client may provide access to a database in accordance with ftp and http-protocols. It provides opportunity for quick and accurate diagnostics of the problem, development of recommendations with regard to its resolution and, when need arises, to make "immediate" corrections without interruption of the user work.

## License policy

**Open source.** The system is supplied with the initial texts. The license authorizes the client to introduce changes in these texts in accordance with the certain rules.

**Unlimited number of users.** The number of the users possessing the unique rights to functions and objects of the

program is not limited.

**Unlimited number of the corporation members.** One database provides the opportunity to keep the accounts on behalf of any number of the economic entities, which are included in the corporation.

**Evolutionary upgrade.** Uniform actual version of the System is supported with all the clients. System kernel and functional structure is being updated evolutionary in the course of user's support.

## Low total cost of ownership (TCO)

**Opportunity of the shareware usage.** Server and clients' OS, application server and DBMS.

**Minimum requirements to the workplaces hardware.** Requirements are defined by type of the client's OS as work with the program requires employment of WEB-browser only.

**Simplicity of maintenance.** Installation, updating, and program adjustment is made in one place - on the server. Administration (back-up copying, setting up of the users' rights, etc.) of the

System is made remotely and does not require IT qualification.

**Free scaling.** There is no need to purchase the License for additional workplaces upon increasing the number of program users.

**Shareware upgrade.** User service fee includes the users' support (consultations, correction of errors) and updating of the System functional. Transition to new versions of the System does not require purchase of the new Licenses and additional

works on their implementation.

**Effective implementation technology.** Classical approach to the implementation project management, optimized list and regulations of works performance, formalized procedure for description of the objects, models and business processes, wide employment of templates for preparation and input of information. Shortened timeline and relatively low cost of implementation combined with high quality and documenting level.

## Tools for the corporate accounting

**Corporation members, partners, and clients** can work on-line in a common database. The number of corporation members (which perform the accounting) and simultaneously working users (workplaces) is limited only by the WEB-server capabilities.

The pricing system and directories are common for corporation members, and access to the primary accounting objects – warehouses, settlement accounts, and commodities categories

– is set up individually. Corporation members have individual price lists, transaction parameters, document templates (in HTML), etc. Partners' authorization enables them to form the orders independently with due regard for the individual prices as well as to monitor their processing and mutual settlement of accounts.

Transparency of commodity, monetary, and information flows provides an opportunity to construct effective logistical

processes, operate warehouse stocks, organize teamwork in the common information field, and perform the management accounting and budgeting with regard to each member of corporation both jointly and severally.

**Accounting objects and layers.** Account objects (transactions, orders, etc.) are copied among themselves, accounting layers and corporation members providing for realization of user-defined business models and carrying out of the transfers, offers

recording, preparation of the tender documentation, etc.

**Operation chains.** The system allows for adjusting the templates, which enable the users "with only one key stroke" to automatically generate groups of the associated accounting objects – transactions, business operations, warehouse transactions and documents for various corporation members in order to realize the certain business purposes – transfer of the

material assets, performance of mutual settlement of accounts, etc.

**Active reports** allow for formation of transactions and execution of the warehouse and monetary transactions in order to maintain the integrity of documentary, monetary, and commodity flows between the corporation members and their counterparties.

**Business-Intelligence (BI).** The system allows for analyzing the tendencies of sales, expenses, client preferences, and other key performance indicators (KPI). KPI monitor shall be adjusted individually for each user. Employment of drilldown option enables to go down to the required level of information specification.

## Advanced means of the team work

The system provides the corporation common information field allowing for on-line cooperation of the geographically dispersed corporation employees among themselves and obtaining personified access to the common information warehouse.

**Coordination** of the System users' work is accomplished by means of an organizer, electronic calendar as well as automatic reminders and notifications system. Notifications about the system event (shipment and receipt of the commodities, receipt of money, etc.) may be sent by internal or external e-mail as

well as in the form of SMS. The system allows for managing of the employees' time, assign tasks to them, and supervise the workload and performing discipline.

**Communication** between users occurs by means of internal mail, corporate bulletin board, forums, and voting. The corporate bulletin board displays announcements for System users (individual, group, or general), messages, budgets (for responsible officers), contacts (current tasks, including assigned by the top management), and critical parameters. Forums and

voting provide an opportunity to exchange opinions on any topics.

**Cooperation** of users reflects in the teamwork of geographically dispersed divisions with the logistics contour objects – transactions (sales and purchases), projects, production objectives, various requisitions as well as electronic documents. Besides, group work with the clients and assignment of the group tasks and actions is also possible.

## Personification of access to information

**Access rights to the System objects and functions** are adjusted individually for each user in accordance to its role in the company business processes.

The user possesses a **personal tree of reports** and **default values**, individual access to the cards of contractors, persons, and documents (by the privacy degree) as well as to the confidential information blocks of these cards.

Objects with the personified access are warehouses, currencies, settlement accounts, types of the prices, transactions and business operations, corporation members

(branches), categories of the commodities, price lists, directory sections, departments and types of orders, etc. Operator individually assigns the access rights to orders, purchases, business operations, and production objectives of other users. Information accessible to the user in transactions, reports, business operations, etc., will be determined by the superposition of its rights with regard to all accessible objects.

**Rights to the program functions** are assigned for the groups of users on roles. The rights of the user are defined as superposition of the right groups where they belong. Regarding each right, it is possible to provide full access to information,

viewing only, or any combination of delete, updating, and addition of data.

**The System interface** (buttons and references on the control panel, functions in the local menus, fields in the reports and forms) for the concrete user corresponds to its rights. It is possible to individually set up the style of interface (colour of forms, size and design of buttons, entry fields, colour and type of fonts, etc.) or to create own one by means of the Styles Editor.

## Management of business processes

**Workflow-system** enables users to regulate and supervise step-by-step execution of the business processes associated with various aspects of the economic activities - sales, purchases, marketing, personnel, electronic document circulation, etc. Its primary goal is to address the issue of «who,

what, when, and how shall do».

Workflow-system is engaged in data processing and activates the business processes participants with regard to their performance of the current tasks. The system registers all

actions of the participants within the scope of concrete realizations of business processes, tracks occurrence of the situations requesting attention of the participants, directs the documents requiring resolution and reminds about the actions, which deadline is about to expire.

Workflow-system employment facilitated dramatic increase of the performing discipline, decreasing the number of errors caused by erroneous actions of the personnel, improvement of

the company operating management, and acceleration of the buyers' orders processing. In addition, this allows lowering requirements for the professional level of the personnel, which

performs routine operations, and therefore the associated costs.

## Monitoring of users actions

**Personification of the users' responsibility** is provided by way of logging of the significant system events with recording of date and time, number of object, type of operation, IP-address, and the user name. Recording of changes of the organization cards fields, persons, commodities, and other key objects is

also available. Each significant System object stores the history of its changes.

**Monitoring** of business processes performance and personification of the separate operations performance are

provided by means of Workflow-system. In order to prevent violations, the System keeps an archive of all documents, which are printed, with registration of the user, date and time of printing.

## Flexibility, adaptability, openness

**Adaptable WEB-interface.** Information fullness of the interface (buttons and references on the control panel, functions in the local menus, fields in the reports and forms) is determined by the user rights to the System functions and objects. It is possible to individually set up the style of interface (colour of forms, size and design of buttons, entry fields, colour and type of fonts, etc.) or to create own one by means of the Styles Editor.

**Drilldown in the forms and reports.** Hyperlinks are widely used for the data detailed elaboration as well as for viewing of the information associated with fields of the forms, lists, and tables.

**Updating of objects by the user.** Saving of a logic condition of selection, grouping, and sorting of data in the users' reports. Individual assignment of the values used by default for each

user. Universal properties and additional fields in the objects enable the user to add fields and create mini-databases in the objects without modification of the program's initial texts.

**Use of formulas.** The user may assign the formulas for calculation of data in the documents (orders, purchases, and business operations), prices of the commodities and bonuses, assigning the mechanism of business operations accountance, etc.

**Document templates in HTML.** It supports generation of user-defined documents for each corporation member with use of the templates in HTML. Built-in HTML-editor.

**Integration with other programs.** Export/import of data in XML format. In order to conduct business accounting, the System

provides export in XML format of transactions posting, receipt and expenditure vouchers, bank statements, tax invoices, orders and purchases, commodities catalogue, etc. Export-import of data from the objects cards, various specifications and the objects lists in Excel format is also provided.

**Development means for programmers.** The system is supplied with open sources. Database structure is opened and described. It provides for possibility of the user reports generation on the basis of sql queries. Generated reports may be saved in the report library.

The system contains case-means for generation of the new modules. They allow for generating both tables of the database with preset characteristics and all necessary interface elements of the module: lists, cards, etc.

## Basic concepts and approaches

### Composition and structure

DeloPro 4.0 System consists of the functional subsystems and modules, which are included in certain contours – **CARD FILES**, **LOGISTICS**, **FINANCE**, **BI** (Business Intelligence), **CRM**, **Workflow** and **ADMINISTRATION**. Subsystems and modules are intended for work with the basic objects of the accountance; they accumulate and display all the associated with them information in the convenient for users format, and also contain a set of reports for the detailed analysis of these objects in

various analytical cuts. The form of the accountance objects presentation is card with the functional inlays and the list (objects log).

**CARD FILES.** System directories. A nomenclatural card file of the commodities. Pricing. Card file of the persons. Card file of the counterparties. Corporate documents.

**LOGISTICS.** Management of the operational, warehouse, and transport logistics – full cycle of the material and documentary flows in the area of purchase, manufacture, storage, and sale of the commodities and services.

**FINANCE.** Financial management. Chains of operations for formation of the intra-corporate balances. Automation of the management and tax accounting. Budgeting by the cash

method. The contour encloses the following subsystems: BUSINESS TRANSACTIONS and FINANCE.

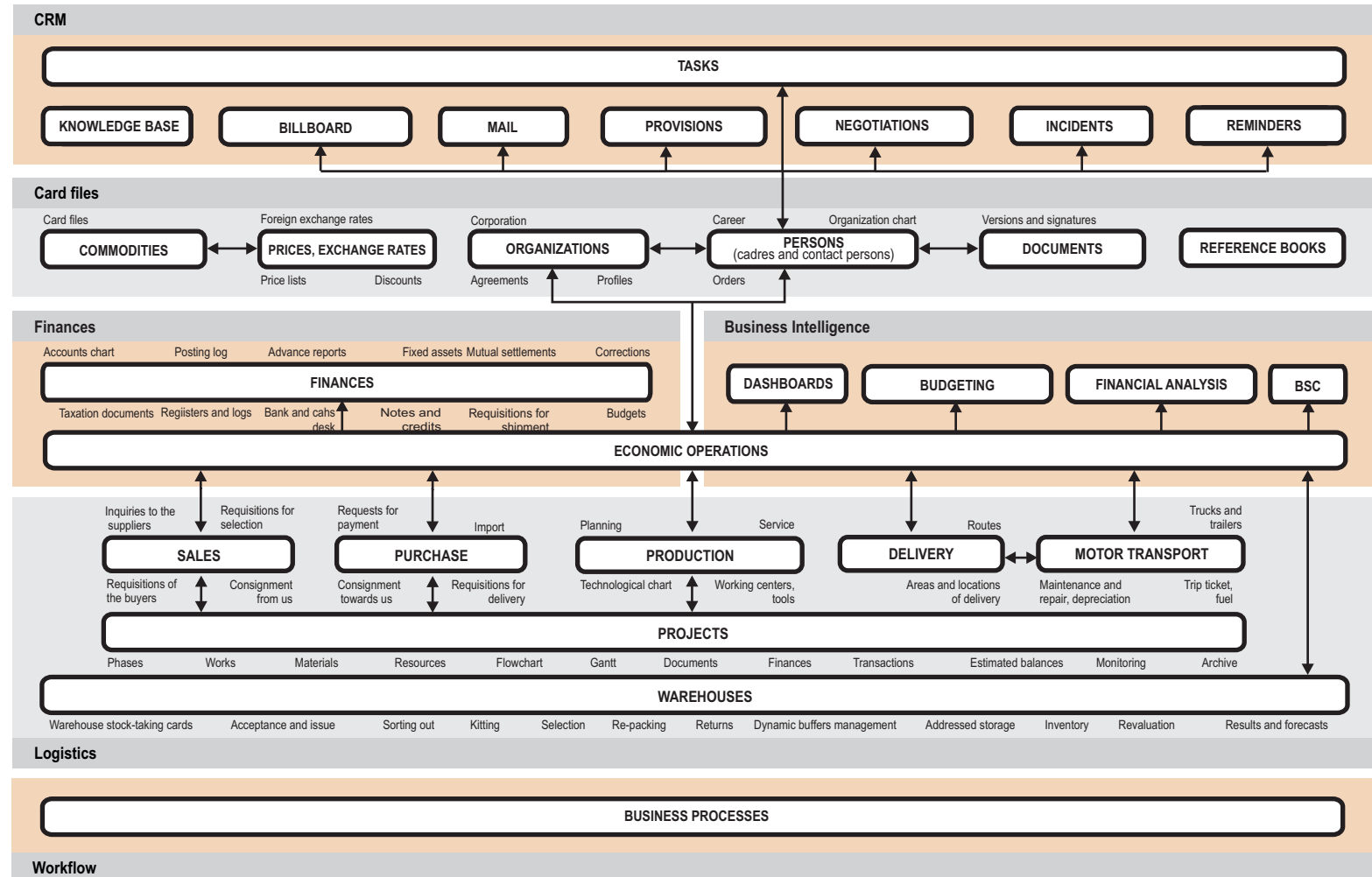
**BI.** Programmable dashboards for monitoring of the key performance indicators. Cubes. Management accounting. Operating controlling. Master Budget. Financial analysis. The balanced scorecard.

**CRM.** Organizer and internal mail. Corporate portal of the news and announcements. Notifications and reminders. Negotiations and events. Management of the mutual relations with counterparties. Time Management.

**Workflow.** Automation (regulation and the step-by-step control of performance) of the business processes associated with various aspects of the enterprise activity – sales, purchases,

projects, marketing, personnel, electronic document circulation, etc.

**ADMINISTRATION.** Matrixes of the users' rights to the System functions and objects. Performance of operations with databases (archiving and back-up copying, updating, and export-import of the tables) and export-import of data in XML format to other programs (1C, Excel).





# Multiple currency business operations. Online-balances with counterparties

**Business transactions log (BT).** The System is based on the principle of chronological recording of all BT – the events causing movement of the enterprise property – changes in its structure, allocation, and formation sources. BT may influence only the enterprise property (balance assets) or just the sources of its formation (liabilities), or property and sources of its formation simultaneously (both assets and liabilities).

Information from BT log is used for the balance formation (for the transactions and counterparties), transaction entries in accordance with the algorithms preset for each type of BT, BT amounts "allocation" by transactions, execution of the warehouse transactions, export (import) to other registration systems.

**Currencies and exchange rates.** The system allows for conducting accountance with employment of any number of currencies and types of their exchange rates. Exchange rates for all currencies are nominated in relation to the national

currency. The System stores the history of all exchange rates.

**BT amount in 4 currencies, cross-rates and foreign exchange differences.** In order to form the on-line balances, BT amount is recorded in the following currencies:

- National currency (for business accounting);
- Management accounting (for the corporation balance formation);
- Balance with the counterparty (for each one individually);
- Transaction (for the transaction balance formation).

Cross-rates for the used type of an exchange rate is calculated at the moment of BT creation and are stored therein. Foreign exchange differences that appear with regard to the commodity shipment or payment are displayed in the respective BT "allocations".

**BT entries.** For the purpose of the management accountance, BT are presented in the income and expense categories tree as

well as in the resources tree. For each BT type it is possible to establish the document templates (in HTML format) and entry mechanisms for any number of the account charts of the business and management accounting (by GAAP methodology and in accordance with the national accounting standards - NAS).

**The tax accounting.** Tax events register is automatically generated on the basis of BT data log allowing to create the tax documents – tax invoices and correction calculations.

**Online balances with counterparties and with regard to the transactions.** Mutual settlements with the counterparty may be conducted in any currency irrespective of the transaction currency. Cross-rates are calculated for the utilized type of exchange rate as at the date of BT creation and are stored therein. The balance with the counterparty in the balance currency is assumed to be the amount of all BTs associated with it and may be detailed by the currencies.

## CRM-strategy tools

The system possesses necessary toolkit, technology, and functionality for realization of the company CRM-strategy by way of its implementation into the business processes and establishment of the respective system of the personnel motivation. CRM concept encloses:

- *Marketing management* – creation of new production types and its promotion, marketing communications, analysis of the competitors' capabilities;
- *Sales and service management*, including before-sale communications, document circulation, commodities delivery, and after-sale service;
- *Contact management* – recording of data on interactions with the clients, mail, notifications about events;
- *Clients management* – recording of data on the clients' organizations and their personnel (contact persons), ABC and XYZ-analysis, individual approach development.

CRM-strategy implies use of the clients' information for establishing the mutually advantageous relations with them for the purpose of earning capacity and business profitability increase and envisages *information* and *analytical* components.

Information component – accumulation of data on the contacts with counterparties personnel, their quantitative and quality assessment, recording of data about flows of the commodities, money, and documents as well as information about the clients' satisfaction.

Analytical component is based on the specialized reports allowing implementing of CRM-strategy primary objective – to determine 20 % of the clients that generate 80 % of the profit and to establish with them long-term and mutually

advantageous relations. In order to do so, the System implements counterparties segmentation and profiling mechanisms, individual prices and delivery conditions, personal managers, service prioritization, etc.

In order to implement the client-oriented strategy, the System employs advanced time management tools, communications and teamwork, ample opportunities of the subsystems, which are part the CARD FILE and LOGISTICS contours. With use of Workflow-subsystem, CRM-strategy implements itself into the company business processes.

### Contact management and time management

**The task** is System object, which records information associated with the company's business processes. The task card records its content, contact person, and the organization, audit and notification dates, scheduled and actual time

parameters, task type, its status, importance degree, accomplishment percentage, relation to the project, expenses, etc. Tasks may be personal or general ones.

Tasks may be used both for the purposes of time management: formation of the daily schedules or assignment to the executors, and for the contact management; recording of information about the users' interaction among themselves or with counterparties'

contact persons with reference to other System objects – negotiations, objects of logistics, etc.

**The task log** (similar to BT log) may be browsed with a breakdown into various System objects – organizations, persons, transactions, orders, projects, etc.

**Time management.** In accordance with their rights, users may generate tasks for themselves, for others, and also be

responsible for the task implementation (supervising agents). Tasks may be displayed in the form of a calendar and daily schedule (for day, week, decade, etc.).

Special reports allow analyzing tasks for the chosen period of time with use of multiple parameter filters.

**Contacts management.** The System registers any information about the corporation personnel and of counterparties

employees (contact persons) as well as about contacts with them. The tasks may be used for registration of valuable information about any contact between the System users within the company and with the counterparties contact persons – telephone conversations, correspondence, personal meetings, etc. Users of the System enjoy the personified access to various information about the counterparties, including tasks.

## Communications management and teamwork means

**Internal mail** allows generating messages for the System users with read notification and registration of the date and time. Users may send messages in accordance with their accessible directory. Post messages log is accessible for viewing by the users separately for each incoming, outgoing, sent, and read mail.

**Notifications.** A number of events in the System (shipment and receipt of the commodities, receipt of money, change of the transaction specification, completion of the commodities selection in the warehouse, etc.) may generate notifications, which proceed to the users or counterparties' contact persons by internal mail or to the specified e-mail address as well as in the form of SMS to the mobile phone.

**Reminders.** The special object that allows creating reminder about the forthcoming event (birthdays, meetings, etc.) via internal or external e-mail at the appointed time with the required periodicity. The reminder requires setting the text and addressee. User may select the System object (orders, persons, credits, personnel orders, etc.) and the fields with dates within it, which need to be reminded of. In order to initiate reminder, one may write the individual program.

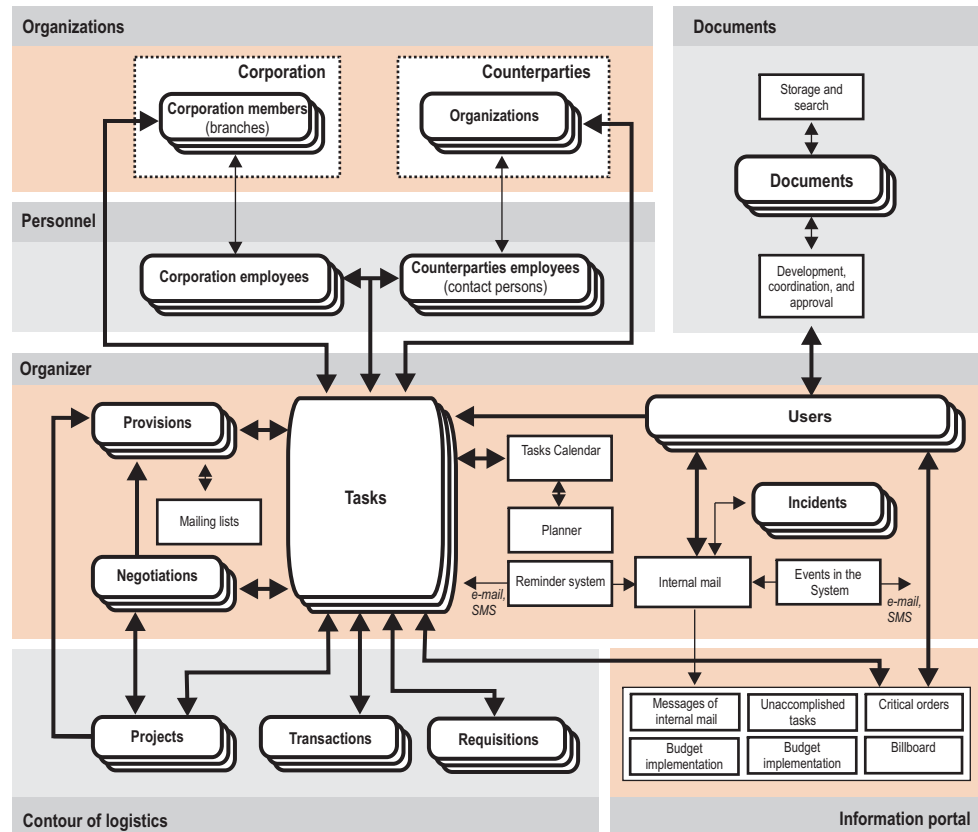
**Information portal.** It is used for communications within the company and its divisions as well as for provision to the System users of personal information within the scope of their in the corporation business processes. It contains personified information displayed in the different sections:

- Bulletin board,
- Critical orders (out-of-date reserves and delayed payments, not completely written off and not completely delivered commodities, paid up but not shipped commodities, etc.),
- Outstanding tasks (own and assigned),
- Unread incoming mail,
- Budget (plan and actual for the budget items, for which the user is responsible),

- Sequence of operations (business processes, in which the user shall perform operations).

Corporation regulatory framework. The System provides for

opportunity to publish in the special section typical economic contracts, instructions, regulatory legal acts, etc., accessible in the real time to all and every users irrespective of their territorial location.



## Marketing activities management

The System enables to keep accounting of marketing activities and promotional events, to store associated analytical and financial information – budgets, target orientation, results, etc. The System provides for the competitors price lists import with their subsequent analysis.

Marketing actions, depending on their scale, may be recorded in the System by means of various objects. For example, development and introduction to the market of new commodities

and services kind may be presented as the project, which describes phases and stages of works, executors' assignments, set up financial estimate (budget) and monitor its execution. Event is used for recording of the conferences, seminars, exhibitions, advertising campaigns, presentations, disseminations, etc.

**Event.** Specialized object for the accountance of user-defined actions. The event card records information about its name,

contents, responsible and supervising employees, its type, time of the beginning and termination, and relevance to the project. Each event contains the list of its participants (users of the System) and the list of organizations, which participate in the event. Documents may be linked to each event. Documents may be disseminated by the internal mail or e-mail to the participants and organizations included in the event.

## Negotiations management

The system permits to register information associated with all stages of the mutual relations establishment with the client – from the first acquaintance and negotiations to conclusion of transactions and discharging of mutual obligations to after-sale service.

**Negotiations.** Specialized object for management of the negotiations process. The negotiations card registers their name, type, counterparty and the contact person, date and time of revision, status (stage) and their content. Negotiations register results of the significant interactions with contact persons of the counterparty (tasks). Various events like

meetings, presentations, etc. may be conducted within the framework of negotiations. Certain documents may be associated with negotiations. The negotiations card may be utilized for generation of the orders for sale of commodities. The user may construct an individual tree of negotiations types.

## Service management

Degree of the client satisfaction with services in many respects is determined by the speed and quality of its provision. The client's referral shall be registered to then identify his/ her concrete need, redirected to the competent employee to resolve the client's problem, and to execute transaction on sale of the works (services) in the post-guarantee period.

**Incidents.** Specialized object for management of the service. Incident card records its name, serviced product, client, date of

creation and contents, the user, to whom it is assigned, as well as the contact information of the incident originator. Besides, it is possible to set up the incident parameters – its status, resolution period, category, and a priority.

Incident may contain user-defined comments and files. Its card may be amended with materials and works with indication of their cost. Each type of the incidents may be associated with Business process. Incident status may change in the course of

its resolution. Each change of the incident status and accompanying comments are brought to the knowledge of its originator by e-mail.

The System forms treelike catalogue of incidents. In accordance with their rights, users may browse through their created or assigned incidents for their resolution as well as resolved and unresolved, general or personal ones.

## Counterparties management

The System permits to create and support in a real time mode a common card file of suppliers and clients with possibility of the target groups formation, and fast and convenient search. Information necessary for decision-making and establishment of the long-term relations with the counterparties can be found in the specialized object – organization.

The organization card encloses its general information and detailed requisites, profile, data for formation of the sales prices (individual prices, discounts, and price lists) as well as other individual conditions and specifics of the mutual relations. The card indicates organization's region, its field of activity, and confidentiality degree (for formation of the access rights to information enclosed there).

The organization card contains information about the personnel

and its contacts derived from the tasks log, user-defined documents and photos, and contracts. In addition, it records the history of mutual relations separately for each negotiation, event, incident, project, transaction, BO, etc. (including on-line balance denominated in the balance currency and with a breakdown into currencies). Where the counterparty is the supplier, the card records provisions of the commodities delivery (price lists of the supplier) and its foreign exchange rates.

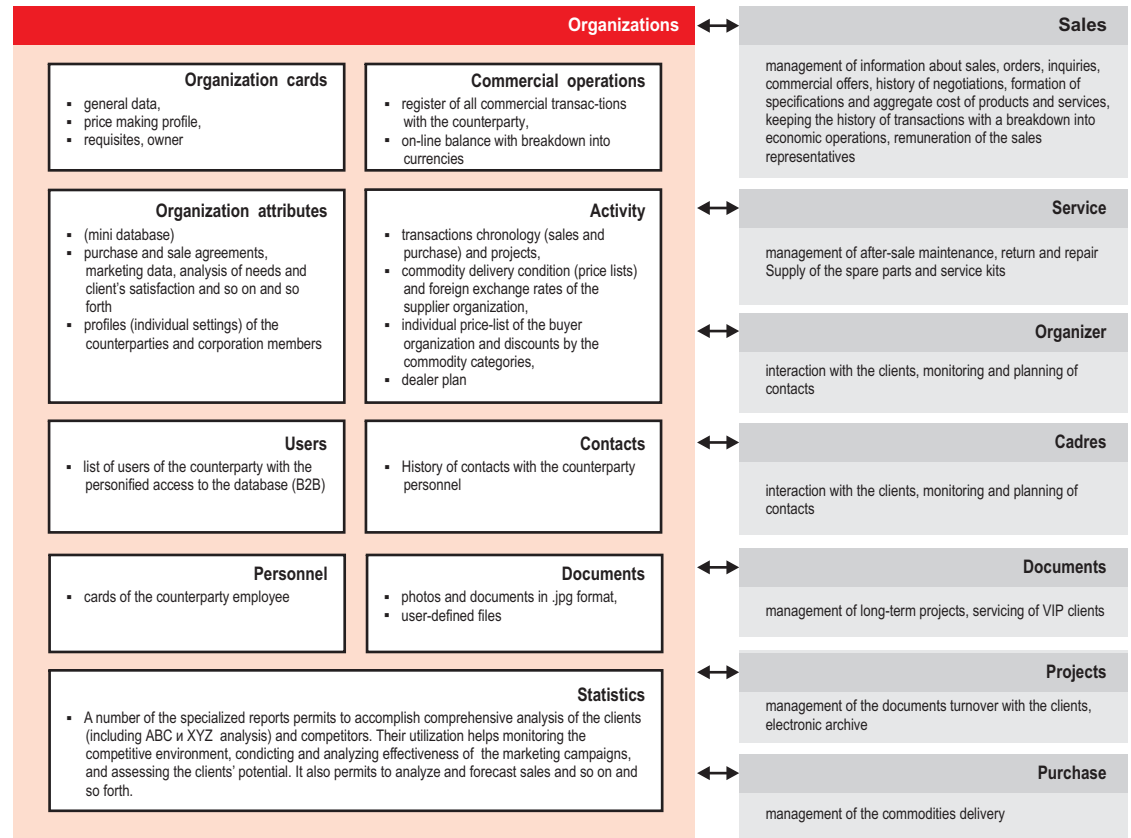
**Balances with the affiliated persons.** The user is able to define the proprietor for each organization and to form the general balance with regard to the proprietor's organizations.

**The client's profile** is one of effective tools of the sales management. The System enables user to specify number of the important parameters in the organization card for

automation of various aspects of mutual relations with the clients and partners:

- Type of the dealer (discount for the categories of commodities);
- Sales contracts (price list, amount, provisions, discounts and payment deferral, responsible salesperson, and so on);
- Bonus system (rebates) by the commodities and groups of commodities with personification of the addressee;
- Synchronization of the commodity assortment (article, name, units of measurement);
- Amount and term (in days) of the permanent credit;
- Amount and term of the temporary credit;
- Adjustment of the electronic data interchange system (EDI) in order to include the client in the delivery chain;
- Individual templates for various types of documents, etc.

**Segmentation of the counterparties.** For the purpose of convenience all the organizations are categorized as suppliers, buyers, manufacturers, and corporation members. The client card identifies its affiliation with the various segments in accordance with the results of ABC and XYZ-analysis. The System allows displaying the organizations card file in the form of the multi-level catalogue separated by the fields of activity, groups, organization types, proprietors, etc.



## Prices and discounts management

Flexible mechanisms of the pricing and discounts managements, which are available in the System, allow implementation of the company's user-defined marketing strategy. Price management in the corporation may be performed in the centralized manner in consideration of the individual conditions for regions, partners and counterparties, as well as contracts and type of transactions.

**Currencies and exchange rates.** In order to form the prices for commodities, any currency and any number of the exchange rate types may be employed. Current exchange rate value in respect of the national currency for all types of exchange rates is stored in the exchange rate matrix. The basic currency and exchange rate type for formation of the commodities prices is specified at the commodity category level. Commodity sales

orders use cross-rate for formation of the commodities price in the order currency, which is calculated in consideration of the commodity current exchange rate value and the order currency value.

The System provides for opportunity of storing the suppliers' current exchange rate values that facilitates linking the commodities price formation with the prices and exchange rates of suppliers.

**Planned cost.** It may be used as basis for formation of the commodity selling price as well as for determination of the planned income in the commodity sales transactions. The planned cost may be calculated on the basis of procurement price recorded in the commodity assortment card. The

procurement price may be formed on the basis of the commodity price in the last (by date) purchase or delivery provision.

**Commodity prices.** The number of used prices is not limited. Planned cost and four basic prices of the commodities in the commodity category currency are stored in the commodity card. Other commodity prices are memorized in the derivative price lists formed in any currency with use of any exchange rate types. Commodity prices may be calculated on the basis of margins on the commodity planned cost or by means of the special program of price recalculation specified in the commodity category. The program for price recalculation may use additional factors depending on the Supplier as well as commodities availability in warehouse as parameters.

**Derivative price lists** may enclose the commodities (special prices are determined only for them) and may be not commodity specific (special prices are applied to all commodities).

**Price formation from the delivery provisions.** The System provides mechanism of the selling price calculation for the commodities on the basis of the concrete supplier chosen delivery provision in accordance with the program (from the commodities category). Delivery provisions supply the currency and exchange rate of the supplier as well as the price for 4 various minimum batches and delivery time.

**Implementation of the commodity prices.** The System memorizes two types of the commodity prices: current and editable ones. For each commodity it is possible to record the history of established prices with registration of the implementation date (transformation of the edited prices into effective ones).

**Group operations** may be performed with the editable prices. This is recalculation of all (taking into account the selected filter)

commodity prices in accordance with programs or coefficients from the commodities category and individual price lists, adjustment of the prices with regard to the VAT with round up copecks, etc.

Profiling of the client. There are several levels of individual conditions formation for the buyers allowing choosing an optimum option in each concrete case:

- price type and discount for the organizations groups by the dealer type (reference to one of four commodity basic prices and percentage discount for all types of the prices);
- special prices and discounts for the commodities (category of the commodities);
- rebates with regard to the commodities (commodity groups);
- individual price lists of the organizations;
- special provisions in accordance with the contracts.

**Profiling of bargains.** Type of the commodity sale order may be referred for each corporation member to one of four

commodity basic prices or to the price list.

**Profiling of contracts.** Each long-term contract with the client may enclose special conditions, discount, and the price list.

**Profiling of corporation members.** It is possible to generate individual prices by the commodity categories for corporation members by way of adding extra charges in per cent as well as with regard to absolute value. Each corporation member may work with use of the individual price list.

**Profiling of users.** The System individually specifies algorithm of the discounts consolidation for each user upon filling up the bargain specification as well as acceptable range of the commodities selling price change. While selecting the client, commodity sale order shall automatically obtain price determining parameters from the client profiles, bargain, contract, and corporation member.

## Sales and purchases management

### Bargain is the center of financial responsibility and consolidation of information

**Bargains.** In order to consolidate information with regard to commodity-money flows with the counterparties, the System utilizes specialized objects – bargain for the commodity sale (*order*) and bargain for the commodity purchase (*purchase*). Generally the bargain represents the center of financial responsibility. These objects memorize the following information:

- bargain terms and conditions (counterparty, dates, currency, contracts, discounts, properties, schedule of payments, shipment and delivery, etc.);
- bargain specification (for the commodities and services);
- BT with regard to the bargain that form its balance;
- associated objects – other bargains, requisitions (for selection, kitting, payment, delivery, purchase, receipt, claim for compensation payment, etc.);
- associated business process and its current status;
- specification updating;
- specification of the additional expenses associated with the bargain;
- history of contacts and negotiations from the task log, incidents;
- user-defined documents, etc.

**User-defined measurement units in the bargains.** Bargains on the commodities sale or purchase may be formed in additional measurement units of the commodities with automatic adjustment of the quantity to the planned packing or volume. Upon posting, write-off, and reservation of the commodities, additional measurement units are automatically recalculated into the basic ones.

**Bargain profile.** The bargain may be associated with the project or be carried out within the framework of the long-term contract with the counterparty, reflect purchase and sale operations in the domestic market or export-import ones, be included in the plan of sales, procurement or manufacture. Bargain type may be individually defined for each corporation member featuring in:

- individual price list;
- settlement account where money shall be transferred;
- shipping document type (invoice, acceptance act, etc.);
- price type;
- employed business process;
- schedule of payments and reserves;
- whether or not it creates taxable event;
- whether or not it creates accounts receivable.

Thus, bargains profiling in accordance with their type is a powerful client-oriented tool of the sales and purchases management.

Formation of the bargain specification. The commodities may be chosen from the list, adjustable multi-level catalogues, and production range configurators. To search for the commodity, user may use the article, name, bar code, cash code, and a lot of filters. The bargain specification may be created by way of copying other objects specifications or importing from Excel. In accordance with its rights, the user may access information about available quantity of the commodities separately from each warehouse and warehouse inventory cards, guaranteed purchases forecasts, and the work in progress.

**Information with regard to specification position.** User may access information about the associated reserves and forecasts, inquiries and requisitions, delivery conditions, shipments and returns, payments and refunds, warehouse stocks and bargains. In addition, the System keeps information about the provided discounts with full details of their structure. Regarding the commodities purchase, the specification position may enclose the list of bargains on the commodities sale, which

served as the basis for initiation of the current purchase.

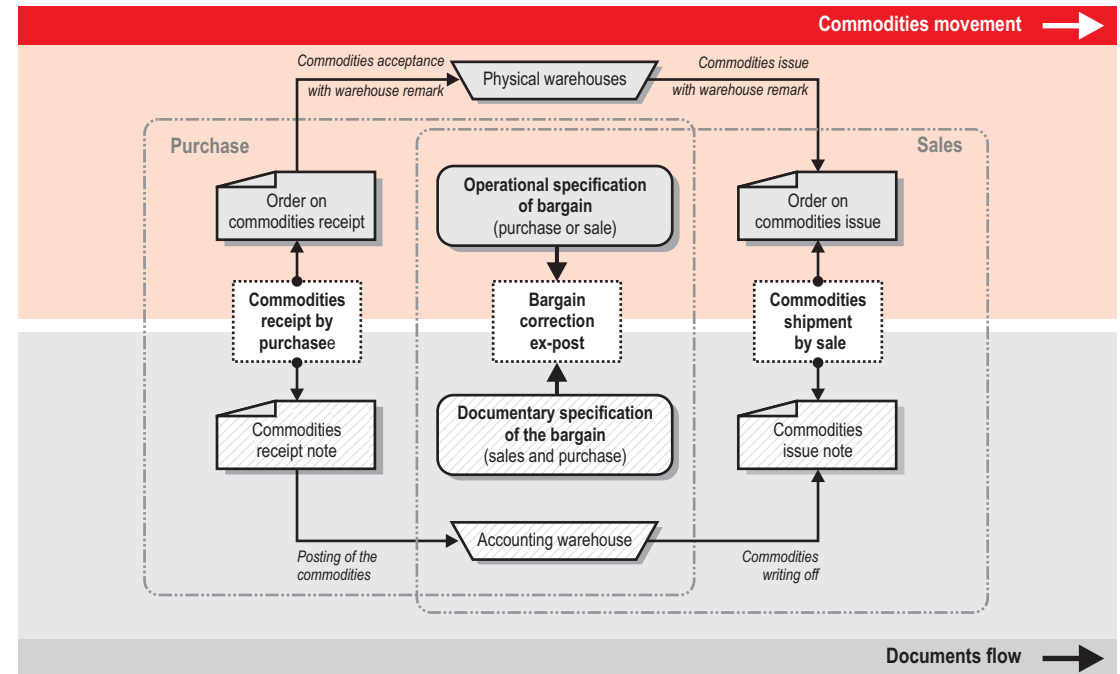
**Bargains properties.** By means of the universal properties options it is possible to memorize any information with regard to each bargain – schedules of payments, receipts and shipments, invoices for partial payment, quality indicators, participants, etc.

**Documentary and operational specifications of the bargains.** In order to perform reclamation work with the counterparties, bargains imply two specifications – documentary and operational ones. Where actual commodities flow for any reasons mismatches documentary one, the operational specification of the bargain shall be corrected with the appropriate amendments. It allows for generating the correcting balance with the counterparty at the end of bargain and bringing all the documents into accord with actual flow of the commodities (to warehouse entries).

**Warehouse transactions.** BT formation associated with the commodities flow changes balance with the counterparty with regard to the transaction but does not result in automatic performance of the warehouse transactions (entry about the commodities flow in warehouse inventory cards) and recording of the commodities leaving the warehouse boundaries.

Following necessary documents are generated on the basis of BT specifications: invoices, warehouse warrants, certificates, specifications, guarantee coupons, etc. For the purpose of warehouse transactions performance, the options are utilized that record the commodities flow in accordance with documentary (posting and writing off) and operational (receipt or issue transaction) warehouse inventory cards.

The described mechanisms allow of keeping the account of documentary flow of the corporation commodities with branches in the accounting warehouses in accordance with documentary warehouse inventory cards, and actual flow – separately for each physical warehouse in accordance with the operational warehouse inventory cards. This allows of implementation in the business accounting of required commodities writing off method (FIFO) irrespective of the actually shipped commodities in accordance with operational warehouse inventory cards. Besides, the commodities in the physical warehouses may be used as the general resource for corporation members with documentary registration of the transactions between them in accordance with actual commodities flow.



**Synchronization of the commodities and documents flow.** Sometimes there are situations when actual commodities flow occurs asynchronously as compared to the documents flow. Special active accounts expose discrepancy between flows on the documentary and operational warehouse inventory cards and this serves as the basis for reclamation work performance (appropriate corrections are introduced in the documents and balances with counterparties, commodities are additionally shipped or returned, etc.) is spent.

**Bargain history.** Bargains allow of viewing all BTs associated with it – shipments and returns of the commodities, payments and refunds, allocation of the commodities payments from their specifications, taxable events and generated tax documents, history of mutual relations with the counterparties contact persons with a breakdown into contacts and documents, and charges and payments of commission fee to intermediaries. The System permits registration of qualitative parameters of bargain performance used for evaluation and motivation of the personnel performance as well as degree of the client's satisfaction. The System memorizes the history of system

events with regard to the transaction (change of the bargain objects with indication of the change nature) with a breakdown into users and also images of all printed documents with indication of the date and printing time.

**Balances for bargains.** Settlement of accounts with the counterparty may be conducted in any currency irrespective of the bargain currency; as this takes place, on-line balance automatically forms in the currency of management accounting and in the currency of bargain taking account of the money and commodities flow history.

**Management of debtors and creditors.** A number of specialized analytical reports with regard to the transactions allows of effectively analyzing accounts receivable and payable, profitability of sales and on their basis correction of the mutual relations policy with counterparties. For example, to prohibit shipment of the commodities upon exceeding the commodity credit amount, the System automatically generate warning e-mail or SMS, etc.

## Sales management

The system encloses the mechanisms necessary for the sales management from the first contact with the client and determination of its requirements to processing of commercial offers and formation of the buyer's orders to reservation of the commodities and formation of orders to suppliers to shipment of the commodities to the buyer at the specified delivery addresses to recording of the order payment, payment of commission fees to the participants as well as managements of the commodities return and money refunding.

**Commercial offers** are important part of the transaction closing process. Their registration in the System is possible by means of the specialized object titled *the buyer's requisition* or by direct creation of order for the commodities sale (with attributes of the commercial offer).

**The buyer's requisition.** It corresponds to an object intended for formation of the preliminary order of the buyer. The requisition may record necessary information about the client and generate the delivery specification and commercial offer. Whole range of means from the commodities sales order is available for formation of the requisition specification and its subsequent correction. The requisition allow of the commodities reservation, their movement to other warehouses, creation of requisitions for delivery of the commodities in short supply.

Buyers' requisitions may be created in System automatically by way of importing files in Excel format or from the electronic data interchange system (EDI).

Order for the commodities sale may be created from the buyer's requisition (or several requisitions) with preservation of the logical links.

**Formation of the buyer's order.** Upon request of the client, the order for commodities sale will automatically include all necessary price determining parameters from profiles of the client, transaction, contract, and corporation member. Price of the commodity position in order currency is formed taking account of the cross - rate of the commodity currency as compared to order currency, discount, quantity and unit of measurement factor.

The prices in the order may be modified with use of the special options. For example, to define the price type in the order: to sell the commodities at the cost price or the chosen price. It is possible to assign the exchange rate and discount or to change the prices by the preset per cent, adjust "to the amount" or "to the whole", to post additional amount by the order specification

The screenshot displays the 'Neologic' software interface for order management. The main window shows 'Заказ № 58' with a list of goods and their prices. A summary table at the bottom provides a detailed breakdown of the order's financials.

Карта №	Склад	Своб.	Всего	Прог.	Отложено	Дата	Серия	П	Цена	Цена у.е.
205	Склад № 7	1	1	0	0	22.09.2008			835.9055	190.92
205	Склад № 9	2	2	0	0	23.08.2008			81.845	17.8571
205	Главный склад	35	42	0	0	08.08.2008			20	3

positions, to change currency of the order, etc. While forming the bargain specification, it is possible to adjust quantity of the commodities to the packing capacity or buyer's units of measurement.

The total amount of the order is formed in consideration of the taxes, discounts and utilized corrections.

**Control of the sales prices.** The individual rights for users are established for each of the commodities prices. The separate right regulates sales of the commodities at the cost price and below. It is possible to specify the mechanism of the commodities sale prices automatic formation taking into account profile of the client, bargain, contract, and the corporation member as well as acceptable range of their change and the minimum margin in per cent of the planned cost.

**Reservation of the commodities for the order.** Users may reserve the commodities available for sale in warehouses accessible for them. Commodities may be reserved, which are "scheduled" to arrive in the selected warehouse in accordance

with the guaranteed purchases or production schedule. It allows of provision for reservation of the commodities "on the road" and "in production" and also planning in advance of their distribution among the corporation warehouses. Creation of the requisitions for reservation with reserves distribution by supervisor is also possible.

**Requisitions for delivery.** The order positions, which failed to be reserved, may be sent for the scheduled and express delivery. The system allows of these commodities automatic reservation for the order after their purchase and receipt at the warehouse with notification of the seller by internal mail about readiness of the commodities for shipment.

**Inquiries to the suppliers.** In the event that the commodities within the scope of the transaction are delivered for the first time or it is necessary to co-ordinate special conditions of delivery with the supplier (price, quantity, or period), special object titled *inquiry to the supplier* may be utilized for this purpose. Inquiries to the suppliers are consolidated in the procurement department and upon obtaining the reply entered into the System as delivery conditions. Sellers may view conditions of delivery for

each position of the order specification.

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**Shipment of the commodities.** BT – *shipment of the commodities in respect of the order* – is formed during shipment of the commodities. Shipment of the commodities may be performed in accordance with one or several orders. Within the framework of one order it is possible to execute several partial shipments. Special options allow shipping of the marked commodities, and paid or the reserved commodities.

*Group printing of the documents.* User may print out the complete set of necessary documents with regard to the commodities prepared for shipment from various orders (invoices, material issue notes, CMR notes and tax invoices, orders for warehouse release, certificates, etc.) by the user's choice.

**Requisitions for selection** may be created from the order and are instruction for warehouse to prepare the commodities for shipment to the buyer. In accordance with the requisitions for selection the commodities move from the storage zone to shipment zone with registration of the information about the selected commodities in each shipped place (box). It is possible to create BTs for the commodities shipment with regard to order for the selected commodities with formation of the complete set of shipping documents.

**Requisitions for picking** may be created from orders for moving of the commodities from various warehouses to the warehouse, from which they will be shipped to the buyer. The moved commodities may be reserved in the source warehouse or "scheduled" in the receiving warehouse.

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**Returns of the commodities.** Upon return of the commodities, BT titled *return of the commodities with regard to the order* is formed. Commodities may be returned under one or several orders. It is possible to execute several returns within the scope of one order. Special options allow of returning the commodities

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The System supports the mechanisms necessary for management by purchases starting from formation of the need in commodities to creation of the inquiries to suppliers about conditions of delivery and requisitions for delivery and to creation of the purchases, "scheduling" the commodities in warehouses, receipt of the commodities and payment of purchases, as well as management of the commodities and

marked or shipped earlier.

*Group printing of the documents.* User may print out the complete set of necessary documents with regard to the commodities prepared for return from various orders (orders for the commodities acceptance at the warehouse, calculation of corrections, etc.) by the user's choice.

**Payments of the orders.** The system allows for linking BT titled *payment of the commodities with regard to the requisition* with concrete orders (to post payments among the orders). As this takes place, BT may be generated from the order (with automatic allocation) or from the bank statement (with semi-automatic allocation). Inside the order, the arrived money may be attributed to the commodities from its specification (to the shipped or not shipped commodities, from tax invoice, etc.) in accordance with various algorithms. It may be necessary for correct formation of the cash receipts or for calculation of profitability of the commodities by payment.

Money are refunded under the order by way of BO creation with the same name.

*Payments transferring.* The system allows of transferring an overpayment (surplus of payment that accrues frequently owing to return of the commodities) under the order or several orders of one buyer to other order (orders) of this same buyer with creation of corresponding tax documents –invoices and correction calculations.

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**Automatic formation of tax invoices.** Upon creation of BT associated with flows of money and commodities under the order, taxable events are created in the chronological order for the transaction amount. The System provides for automatic formation of the tax invoices for these events by clicking the appropriate link with the earliest date. When all the invoices are issued, the user may view the tax history with regard to the order.

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money return.

Purchases may be accomplished in centralized way for the whole company, in decentralized way, "to order", for replenishment of warehouse stock, etc.

**Current deficiency.** Calculation of need in purchase of the

**Management of the commission fees.** The System contains mechanisms for efficient management of the commission fees both for sellers and their partners in dealer network.

*In order to motivate the sellers,* each transaction memorizes its participants (company employees) and degree of their influence upon its result. These data are accessible for the *Bonuses* module (salary calculation), which calculates compensation for each participant in accordance with user-defined algorithms (for example, per cent of the total or marginal income with regard to the paid and shipped transactions taking into account user-defined target indicators).

*In order to motivate the partners,* the organization profile specifies the bonuses scheme (rebates) for the commodities and commodity groups with personification of the bonus recipient. In this regard, bonuses will be automatically accrued during registration of the order payment BT by way of creation of the respective BT to the specified recipient for each transaction on the commodities sale to these organizations.

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**Consignment operations.** The system supports management of transactions with use of the contracts of commission, consignment, or secure storage. Upon return of the commodities from consignment, transaction shall be formed on sale of the commodities and their shipment to the buyer. Special reports enable to supervise completeness of the transactions.

**Barter operations.** In order to accomplish cross-cancellation of debts between the companies for any set of transactions on the commodities (services) sale and purchase, special BT is utilized, which determines the debts amount. Here, each of the transactions (purchases and sales) may be partially paid in the monetary form and partially by way of cross-cancellation of debts.

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commodities (deficiency) may be accomplished with regard to orders of the buyers, production, and warehouse, as well as with regard to requisitions for kitting. In order to allow for the seasonal fluctuations of demand, it is possible to use average daily sale of the commodities for the chosen period of time taking into account sales in the delivery period.

## Procurement management



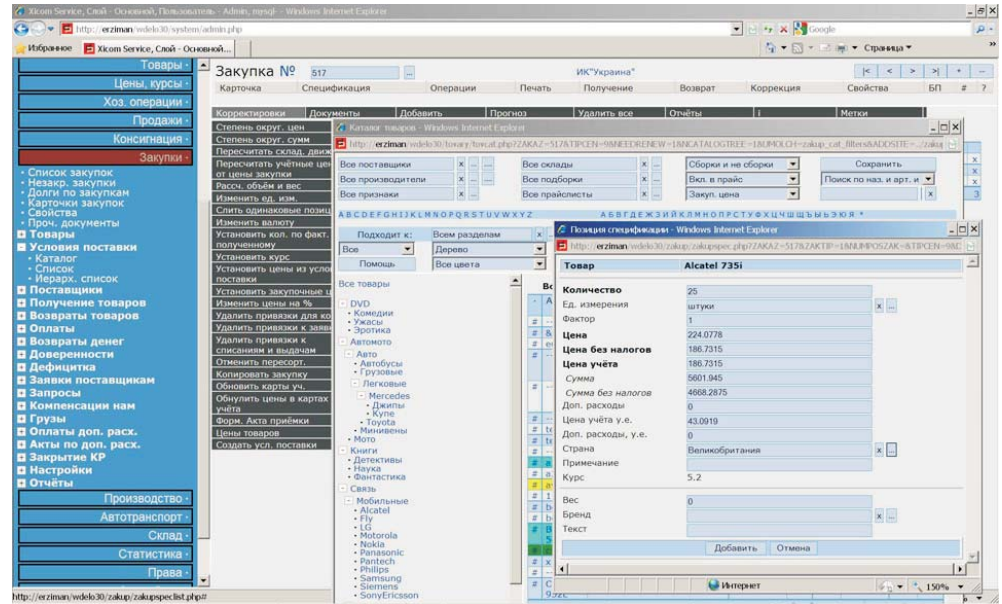
Users may specify various algorithms of the deficiency calculation and use as filters various parameters of the counterparties, commodities, transactions, production orders, current warehouse stocks, etc. Result of the deficiency calculation is current deficiency, which may be utilized for generation of the requisitions to the suppliers.

**Processing of inquiries to the suppliers.** Inquiries about delivery conditions (by the prices, dates, and quantity) arriving in the procurement department from other divisions may be processed separately or in consolidated way by establishment of the inquiries group separately for each supplier. Upon coordination with other participants, delivery condition for each commodity is entered into the database with indication of their period of validity. At this stage, commodities requisites (name and article) for each supplier are entered into the database.

**Requisitions to the suppliers.** Those are the preliminary order on the commodities delivery and they may be created from the catalogue of the commodities, current deficiency, delivery conditions or by way of import from file in Excel format. Requisitions for delivery to one supplier may be consolidated (merged) with memorization of information "to whom". The document is formed in accordance with individual template and in the required units of measurement for each supplier. Results of negotiations in the form of tasks are recorded within the scope of the requisition to the supplier. The System allows of viewing conditions of delivery from the alternative suppliers for each position of the specification as well as establishing the revision date and entering the confirmed delivery date, price, and quantity. On the basis of the requisition to the supplier, the user may create purchase in any member of corporation together with the requisition for delivery of the commodities.

**Purchase formation.** The purchase specification may be created from orders of the commodities sale, partly received commodities in the requisitions to the supplier, conditions of delivery of the chosen supplier, file in Excel format as well as from the current deficiency. "To whom" information about the transaction initiator (order of the buyer, requisition of the marketing department, deficiency of production, etc.) is recorded in the latter case across the whole chain of the commodities movement.

The prices in purchase may be modified from each position of the purchase specification. It is possible to specify an exchange rate, change units of measurement, currency, prices by the specified per cent or from conditions of delivery for all positions



of the purchase specification. Special options allow of prohibition of the commodities purchase at the price that exceeds procurement price in the commodity card.

**Import purchases.** The System envisages mechanisms for the import purchases management, including sheet-by sheet entry of the cargo customs declaration (CCD), allocation of taxes, charges, and customs payments to the cost of the commodities, settlements with suppliers in the purchase currency, and conduct of the reclamation work.

**Positions carrying over to other purchase.** The System allows of carrying over the chosen purchase specification positions to other purchase with keeping "to whom" information.

**Receipt of the commodities.** BT – *reception of the commodities on purchase* is formed upon receipt of the commodities. The commodities may be received under one or several purchases. It is possible to execute several partial receipts within the scope of one purchase. Special options allow of obtaining the marked commodities and paid up or reserved commodities.

**Requisitions for the commodity receipt.** They may be created from the purchase and are an order to warehouse to receive the commodities. BTs for the commodities receipt under purchase are created in accordance with actually received commodities and warehouse transactions are performed (in the warehouse inventory cards). In the event of discrepancies (mismatching of the commodities quantity or misdescription) in respect of the commodity receipt note specification, BT titled *correction of price or quantity* is created. In this way it is possible to supervise discharge of obligations by the supplier with regard to purchase and conduct reclamation work.

**"Scheduling" of the commodities.** The system allows of "scheduling" (virtually receiving) of the commodities in the chosen warehouse before actual reception under the guaranteed purchases. For this purpose virtual warehouse inventory cards are created, where commodities are scheduled with possibility of their reservation. Upon actual receipt of the commodities at the warehouse, virtual cards become actual ones and the commodities are available for shipment.

**Powers of attorney.** The system allows of creating powers of attorney for receipt of the commodities from the chosen supplier under one or several purchases. They imply the seal affixed both on the strictly accountable form and the typical form

template. The registration book of powers of attorney is automatically formed in accordance with the established sample.

**Return of the commodities.** Upon return of the commodities, BT titled *return of the commodities with regard to purchase* is formed. Return of the commodities may be accomplished under one or several purchases. It is possible to execute several returns of the commodities within the scope of one purchase. Special options allow of returning the marked or received earlier commodities.

## Sales and purchases planning

In order to schedule sales, the System provides various analytical reports-cubes with regard to the structure of sales. These reports permit to obtain sales volumes of the commodities or groups of the commodities for the chosen time interval (with a breakdown into the specified number of days, months, quarters, or years) in quantitative, cost, or percentage denomination as well as in marginal income volume. It is possible to do detailed elaboration by regions, sellers, branches, proprietors (for network structures), etc. in addition, one report may compare data for two reporting periods with voluntary pace.

**Payments of purchases.** The system allows of linking BT titled *payment of the commodities with regard to purchase* towards the concrete purchases (to allocate payments with regard to purchases). Here, it is possible to generate BT from the purchase (with automatic allocation) or from the bank statement (with semi-automatic allocation). Money for purchase payment may be credited to the commodities from its specification in accordance with various algorithms.

The refund with regard to purchase is conducted by BT creation with the same name.

**Transfer of payments.** The system allows of transferring an overpayment (surplus of payment arising out of return or non receipt of the commodities) under the purchase or several purchases of one supplier to other purchase (purchases) from this supplier with execution of the relevant tax documents.

**Requisitions for payment.** It is possible to create the requisition for payment under the purchase, which may attach any documents (invoice, contract, and so on). Requisitions shall proceed to the financial director who confirms the amount of payment and issues instruction for payment.

It is possible to assess the demand adjusted for the seasonality of sales by means of deficiency calculation for the daily average sales. The report enables to calculate the required volume of the commodities purchase for the chosen period of sales on the basis of the information about daily average sales over the period of sales analysis and forecast during the commodities delivery taking into account warehouse stocks as at the date of analysis, minimum warehouse stocks as well as the commodities expected to be received under the purchases.

While using the statistical reports, information about the current sales, change of market conditions, implementation of marketing events, etc., planned requisitions are formed in monetary and commodity terms. The company sales plan is formed by way of consolidation of planned requisitions from the geographically dispersed divisions. The purchase plan is formed on the basis of the sales plan. Plans execution monitoring (plan-factor analysis) is carried out by means of the specialized report plan.

# Inventory management

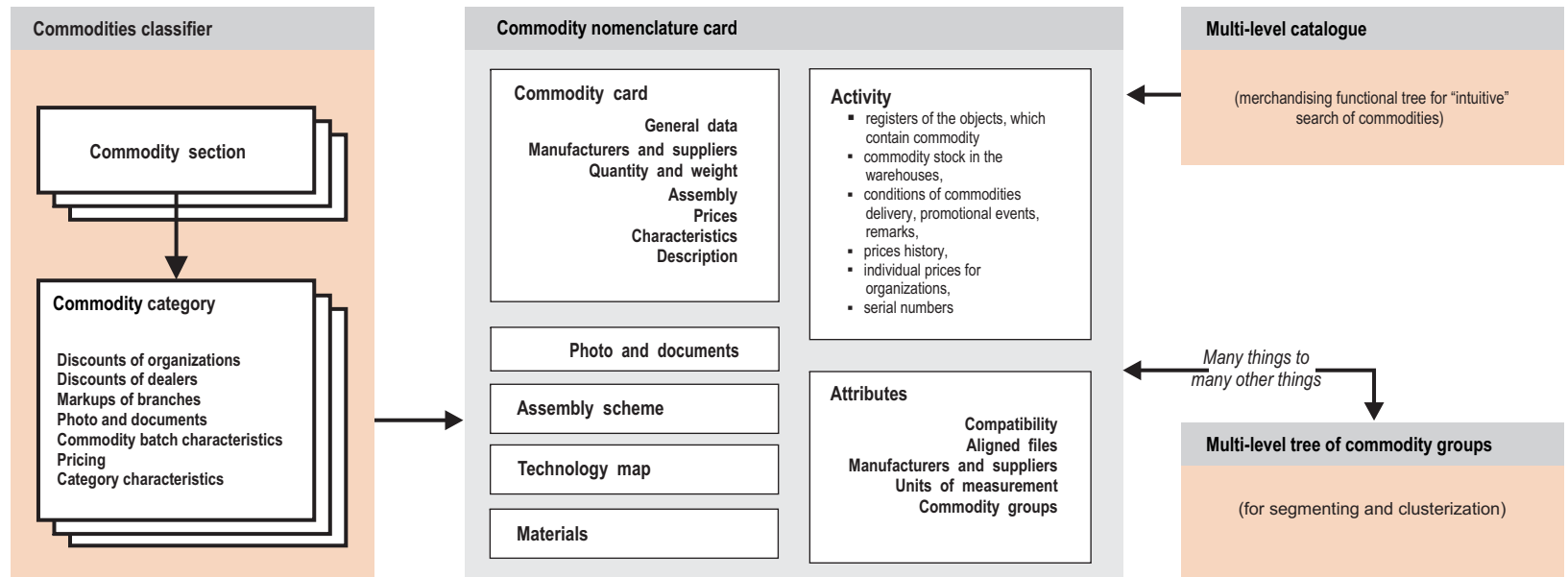
## Merchandising accountance

The system contains the tools allowing to consider specifics of the stock-list and to store user-specified information about the commodities and their properties. In order to perform fast search for the commodities with required consumer characteristics, there are various navigation means. Special commodity configurators permit to work with the complicated commodities consisting of the large number of interdependent components and component parts.

**Nomenclature card** contains data about the commodities necessary for correct execution of the company business processes and also accumulates information from all the System objects, which deal with the commodities. Those are requisites (names, articles, bar codes, cash code, various attributes, brand, etc.), suppliers and manufacturers (with the commodities requisites), useful lives and deliveries, weight and dimension characteristics, units of measurement, standards for purchase, stocks, and rejected products separated for each warehouse, minimum shipment lots for the different prices of the commodities, etc.

The screenshot displays the 'Каталог товаров' (Goods Catalog) window in the DeloPro 4.0 Enterprise Management System. The window shows a list of goods with columns for '№', 'Заказ', 'Дата', 'Календа', 'Заказчик', 'Менеджер', 'Цена', 'Вал.', 'Ед.', and 'Кол.'. A table of goods is visible, including items like 'Anti Viral Toolkit Pro' and 'DeloPro'. The interface also shows a sidebar with navigation options like 'Справочники', 'Финансы', 'Управление', 'Документы', 'e-shop', 'Персонал', 'Организация', 'Организатор', 'Бизнес-процессы', 'Проекты', and 'Товары'.

№	Заказ	Дата	Календа	Заказчик	Менеджер	Цена	Вал.	Ед.	Кол.
955	955	25.03.2009	Калена	DeloPro		30,5800	грн.	шт.	2
956	956	26.03.2009	1234567890	Admin		15,6000	грн.	шт.	1
957	957	26.03.2009	1234567890	Admin		15,6000	грн.	шт.	1
962	960	27.03.2009	Виращ	Admin		17,5600	грн.	шт.	2
965	960	27.03.2009	Виращ	Admin		14,0400	грн.	шт.	1



The commodity card stores commodity selling and procurement prices, parameters for commodities assemblage in production, data about current stocks of the commodity, value of its key characteristics, description, etc. It is possible to specify areas of application for the commodities, lists of the replacing and similar commodities, as well as the ones that may replace the given commodity.

Commodity card contains documents in any format (photo, drawings, certificates, etc.), data about the commodities flow with a breakdown into transactions (sales, purchases, and production orders), information about warehouse stocks with a breakdown into batches, history of the prices, individual prices of the organizations, events, comments, etc.

By adjusting the universal properties, the user may store in the commodity card the linked mini-databases of user-defined property values.

**Delivery conditions.** The system allows of importing the price lists of all suppliers, which are stored in the commodity card as delivery conditions.

**Commodity type** (commodity, service, resource, work or container) determines a way of its further processing in the

accountance. The commodity may be presented in the form of assembly unit (assemblage). Assemblage is characterized by the sheet of materials and accessories, process chart, and scheme. Assemblage may be "phantom" one (to break up to components upon entering the order), represent the complete set (not to be assembled), be assembled in the order, during production or in a warehouse.

**Means of navigation and analytics.** The commodity may be simultaneously presented in several catalogues – in a *multilevel tree* (for the purpose of exact positioning and "intuitive" navigation), in the *classifier of the sections and categories* (for pricing purposes and recording of merchandizing characteristics), as well as in the *commodity groups tree* (for segmentation and clusterization). Any of the trees may be utilized for the commodity navigation and specification of the analytical reports formation conditions.

The multilevel tree is constructed on the basis of the developed classification of the commodities considering all their essential generic and consumer attributes. The commodity occupies only one position in one of the tree branches.

The tree of commodity groups contains unlimited number of the

enclosure levels. The commodities may be placed in the user-defined number of groups (clusters, segments) in accordance with their behaviour in the market. Later on it may be used, for example, for optimization of the commodity stocks.

Classifier of sections and categories is of 3-tier type. The commodity may belong to one of the classifier categories. Parameters and pricing principles, key consumer characteristics (which individual values are stored in the production range cards), as well as properties of the batches of commodities included therein (for example, colour, size, completeness, material, etc.) are specified at the category level.

**Configuration means.** The System encloses a number of the production range specialized configurators (for computers, furniture, windows, etc.). Production range configurator is the tool for the automated formation of the assemblage commodity (model) in accordance with the client's requirements. Here, the user-defined treelike algorithm of selection of the commodity interconnected components (component parts) and their parameters (from a set of the components available for each commodity) is employed. As a result of configuring, the unique model code and its price are automatically formed.

## Inventory accountance and logistics

The system allows of keeping account of the commodities flow at unlimited number of warehouses with a breakdown into commodity batches. The System establishes two warehouse inventory cards - accounting and operational one for each commodity batch.

**Warehouse inventory cards.** New warehouse inventory cards are automatically created upon the commodity receipt at a warehouse or its moving between warehouses. Cards enclose information about the supplier, unique number of the batch and its bar code, its location (storage address), characteristics of the commodities batch: date of manufacturing, certification and useful life, country of origin, and series number. The commodities prices are stored in the cards (for the business and management accounting purposes), its customs cost, quantity and packing, minimum packing division (for delivery), as well as merchandizing properties of the commodities batch (colour, size, completeness, etc.), certification information and links to the associated documents.

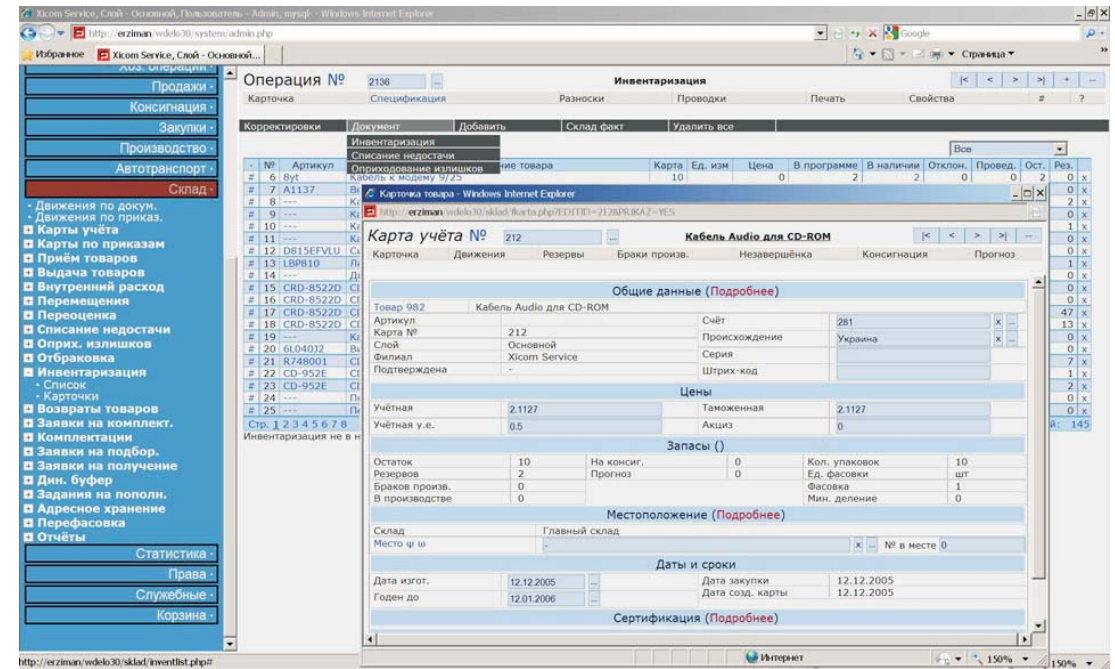
**History of the commodity flow** is recorded in the warehouse inventory cards with a breakdown into specialized BT: receipt and shipment of the commodities, write-off of shortage and entering into accounting records of surpluses, internal consumption and moving, reevaluation, rejection, inventory and return of the commodities.

**Algorithms of the commodities selection.** While automatically selecting commodity for its write-off, reservation, kitting, selection, or moving from a warehouse to another warehouse, algorithm may be selected (by date of the commodity batch – FIFO or LIFO, by the commodity useful life – FEFO or LEFO, by minimum or maximum price, by minimum or maximum quantity) together with concrete commodities batch and warehouse inventory cards, packing and minimum and maximum commodities balance on the warehouse inventory cards, etc. may be specified.

### Commodities crossing warehouse boundaries.

Warehouseman records information in a database about the commodities receipt or shipment by making entry (indicating quantity) in the respective electronic warehouse order (receipt or issue one). This operation may be conducted with use of the bar code scanner with entering serial numbers of the commodities in case of need.

**Automatic correction of documents in accordance with warehouse entries.** Information from warehouse about actually



issued or received commodities is displayed in specifications of the respective BTs. By means of a special option, BT specification and warehouse transactions in warehouse inventory cards may be brought into accord with actual warehouse entry about shipment of the commodities to the buyer and the complete set of documents may be generated for shipment of the commodities.

**Through bar coding.** All warehouse operations may be conducted on-line with use of the bar codes scanner. It is possible to print labels with bar codes for each commodity batch and each commodity in the course of the commodities receipt. The System provides for using of the commodity supplier bar codes or generating the internal bar codes in accordance with the specified algorithm. The bar code is stored also for each commodity unit of measurement and used during warehouse operations. Bar codes of the commodities may be inserted into the shipping document templates, which are also assigned with the unique bar code. There is a possibility of BT specifications formation in off-line mode by way of importing files from the scanner.

**Warehouse configuring.** Address storage. Commodity stock record may be conducted for the unlimited number of warehouses and special zones in warehouses: boxes, racks, stands, and storage cells. In this case the storage cell address is determined by number of the box, rack, and stand.

Alternatively, the System allows of creating user-defined warehouse configuration in the form of *storage places tree*. It is possible to specify the type for each storage place featuring the storage parameters – storage unit (box, underpan, pallet, barrel, etc.), number of layers and number of places in a layer.

While performing warehouse operations, it is possible to clearly specify the storage address of concrete commodity batch in the corresponding documents for each commodity position.

**Individual parameters of warehouse logistics.** It is possible to specify minimum and maximum stock, re-order level, purchase standard, period of inventory, and the storage address

by default for each commodity with a breakdown into each warehouse.

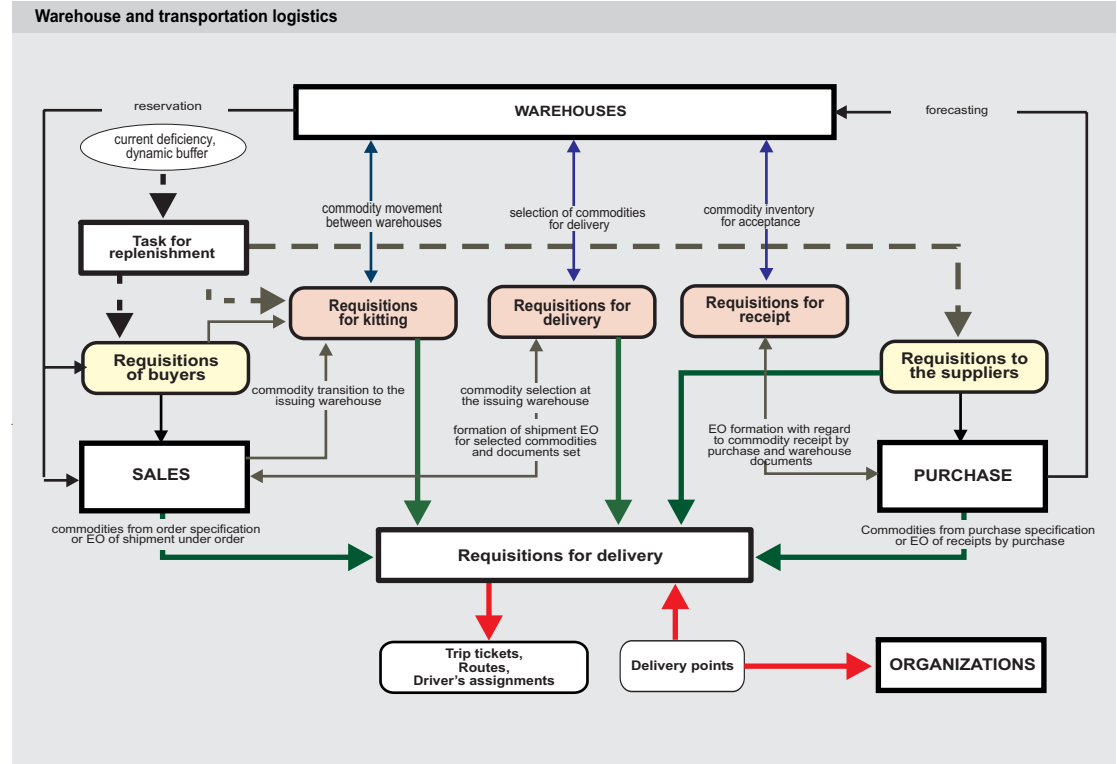
**Commodity packing management.** The system allows of combining the commodity packing with its receipt at the warehouse. The commodity may be entering into accounting records in the different packages with regard to the same purchase. When necessary, the commodity may be re-packed with use of packing-assemblage or packing-dismantling warehouse operations. In the sales process, warehouse commodities balance is available with a breakdown into packages; and commodities may be shipped in different packages. Various algorithms of warehouse inventory cards selection with regard to packages are available for the commodities automatic writing off.

**Work with the complete set commodities.** While receiving complete set commodities at the warehouse, their sets may be broken into the commodity components with indication of their storage places. While delivering the complete set commodities from warehouse, orders for warehouse release shall contain information about location of all components that are part of the commodity complete set.

**Tasks for warehouse replenishment.** They may be created manually, from current deficiency or at the rate of buffered commodities stock replenishments. Further, requisitions of the buyers (for replenishment of other warehouses), requisitions for kitting, or requisitions to the suppliers may be created from the tasks for replenishment.

**Inter-warehouse movements.** They are to be made on the basis of requisitions for kitting formed from various objects – orders for sale of the commodities, requisitions of the buyers, and tasks for warehouse replenishment. Reservation of the moved commodities at the source warehouse or "scheduling" at the receiving warehouse as well as tracking of their current location ("on the road") is also possible. The System enables to adjust the commodities quantity to package capacity in the requisitions for kitting. It is also possible to divide the requisitions for kitting.

Within the scope of the requisition for kitting (or several requisitions), the user is able to create kitting BT that reflects actual movement of the commodities, to execute warehouse transactions and generate the complete set of necessary documents. Multi-step movements of the commodities between warehouses are also possible.



**Selection of the commodities for shipment.** Warehouseman moves the commodities to a shipment zone on the basis of requisitions for selection. BT of the commodities shipment under the order and the complete set of necessary shipping documents may be generated in accordance with the warehouseman entries about the selected commodities together with warehouse transactions posting (in the warehouse inventory cards). Requisitions for selection record actual time of the selection beginning and end as well as data about the packer and controller. This information may be used for the payroll accounting of warehouse workers.

**Packing of cargo.** While selecting the commodities for shipment (moving), the System allows of packing them into various places (boxes, bags, etc.) with formation of a place bar code and packing sheet containing the list of the packed commodities.

**Acceptance of the commodities.** Warehouseman accepts the received commodities on the basis of requisitions for the commodities receipt, that is: checks conformity of the commodities receipt documents with actual quantity and range of the commodities while entering into the System the revealed mismatches (disparity of the commodity quantity or misdescription). All necessary BTs are generated and warehouse transactions are carried out in accordance with actually received commodities.

**Transformation of measurement units.** With use of the requisitions for of the commodities receipt the user may transform the commodities units of measurement specified in documents of the supplier into units of measurement accepted for the business accounting in the company (for example, kilograms into running meters, running meters into packs, tons into liters, etc.) with producing the necessary documents to be recorded in the books.

## Buffers management

Efficient management of the warehouse stocks is the distribution business essence. Managers shall make decisions daily: what and where the products stock shall be stored in order to completely satisfy the demand with minimum working capital.

**The classic approach** assumes use of expensive BI-systems for the analysis of consumer demand and its forecasting. Minimum commodities stock balance in the concrete places is established and maintained on the basis of the forecast and delivery parameters. The primary problem is low long-term forecasts accuracy and large associated risks.

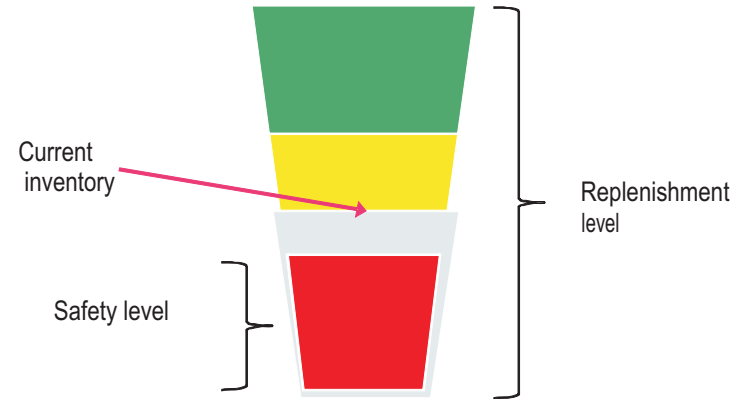
**The Theory of Constraints (TOC) approach** – assumes that accuracy of the forecast is not important but *the speed of replenishment* of stocks in the concrete place. Approach essence as applied to distribution is as follows:

- The finished commodity stock in any chain link is established at a level sufficient for satisfaction of requirement for this stock during time of its guaranteed replenishment by a previous link,
- Stocks are replenished at a rate of their actual consumption.

Forecasting horizon is limited by the stocks replenishment period, therefore the forecast is more accurate and inexpensive. The size of stocks in each delivery chain link, their turnover, and financial result directly depend on the speed of stocks replenishment.

**Main principles** of the logistics processes organization for inventory management on the basis of TOC:

- accuracy of the commodities sales forecast at the company level is always higher than at branch or shop level. *Maximum stock shall be kept in the center,*
- the stock at the shop is determined by *the demand level* (we use statistics of sales in the recent periods), *time of replenishment* from the central warehouse and adjustment for the business specifics (probability of failures, commodities damage, etc.),
- *replenishment time* is determined as the amount of time for placing of the order and for its delivery from the previous link of deliveries chain,
- commodity shall be replenished in the shop to balance the *quantity shipped*. Replenishment shall be made as often as practicable and economically justifiable,
- in order to calculate the stock in the central warehouse, the statistics for the whole company and delivery conditions for the last period are used. The stock shall be replenished in



$$\text{Buffer status (buffer penetration depth)} = \frac{(\text{replenishment level} - (\text{available inventory} + \text{supply forecast})) * 100}{\text{replenishment level}}$$

the course of its consumption by the shops,

- Stock balance (*buffers*) is continuously corrected in accordance with actual change of demand.

**Dynamic buffer.** Commodity stock balance that needs to be maintained (*buffer size*) shall be determined for each link of delivery chain and individually for each commodity item. The initial buffer size is determined as the maximum consumption over average replenishment time multiplied by 2. At later stages, buffer size is corrected with use of the special algorithm that tracks actual demand.

**Penetration into the buffer** – ratio of the commodities quantity necessary for replenishment of the buffer to the size of the buffer (in per cent)

The buffer colour is established in accordance with the penetration depth:

- from 0 % to 33 % - green,
- from 33 % to 66 % - yellow,
- from 67 % to 99 % - red,
- 100 % - black.

When the stock in any delivery chain link drops below the replenishment level, it should be replenished immediately to this level. The immediate response to actual sale permits to avoid the need in the sales forecasting for short-term and medium-term horizon.

**Management of the dynamic buffer.** In the course of sales, *the buffer status* is daily analyzed:

- In case of regular penetration into a red zone, replenishment level shall be increased,
- If the stock balance does not penetrate the safety level for the long period of time, replenishment level shall be lowered.

The buffer size changes in accordance with the following algorithm:

- where the aggregate penetration into a red zone during revision period is more or equal to the size of red zone, the buffer size shall be *increased for 1/3*,
- where actual penetration into the buffer during revision period does not exceed green zone limits, the buffer size shall be *reduced for 1/3*,

- after change of the buffer size, it does not change in the following replenishment period.

As a rule, the revision period in red and green zones shall be less than the replenishment period.

**Individual parameters of dynamic buffers.** The System enables to specify the buffer size for each buffered commodity individually for each of warehouses across the whole delivery chain including shops, retail network, and dealers' warehouses. The initial buffer size may be defined manually or semi-automatically from the sales dynamics report. The System enables to specify parameters for each buffer:

- *replenishment level* in the basic units of measurement,
- *size of red and green zone* in per cent as compared to the replenishment level,
- *replenishment period* (in days),
- *revision periods of penetration into red and green zones* (in days),
- *minimum level of stocks,*
- Flag "to consider the delivery forecast " during the replenishment period.

**Calculation of warehouses condition.** The system allows of making daily calculation of the company warehouses condition manually or automatically with use of the timer. Database contains information for each buffered commodity with a breakdown into each warehouse about warehouse stock balance, quantity of the commodity sold during the day, its planned cost and sales price, as well as the buffer status.

**Partner warehouses management.** The System allows of adjusting the user-defined models for import of the partners' (dealers, retail network, etc.) warehouses condition from Excel format file. The database registers information about the stock balance and sales volume for a day as well as planned cost and sales price for the partner. It allows of managing the commodities balance for the purpose of the commodity stocks minimization, which are to be transferred for realization or consignment.

**Change of the buffers size** shall be performed before their replenishment. The System develops recommendations for the buffers parameters change. New parameters are initiated manually or automatically.

**Logistics of the buffers replenishment.** For the buffer replenishment, the task for the warehouse replenishment is used, which is created separately for each warehouse (own or

delivery chain partners). In order to fill the replenishment specification, the option is used, which helps:

- select all buffered commodities of the chosen warehouse, which term of replenishment fall due judging by the date of last task for replenishment and the replenishment period,
- determine the commodities amount for the replenishment as a level of replenishment minus the current balance at the warehouse.

Requisitions for kitting for commodities movement from the central warehouse to the local warehouses, requisitions of buyers with respect to the partners' warehouses, as well as requisitions for delivery for the purpose of transport logistics management are created in accordance with tasks for warehouse replenishment. Deficiency and requisitions to the suppliers are formed in accordance with requisitions for kitting of the central distribution warehouse.

**Management quality control.** It is accomplished by calculation of the parameters for each commodity during the analysis period, which characterize missed profit TVD (throughput value days), surplus of the warehouse stocks IVD (inventory value days), and period of the stocks turnover.

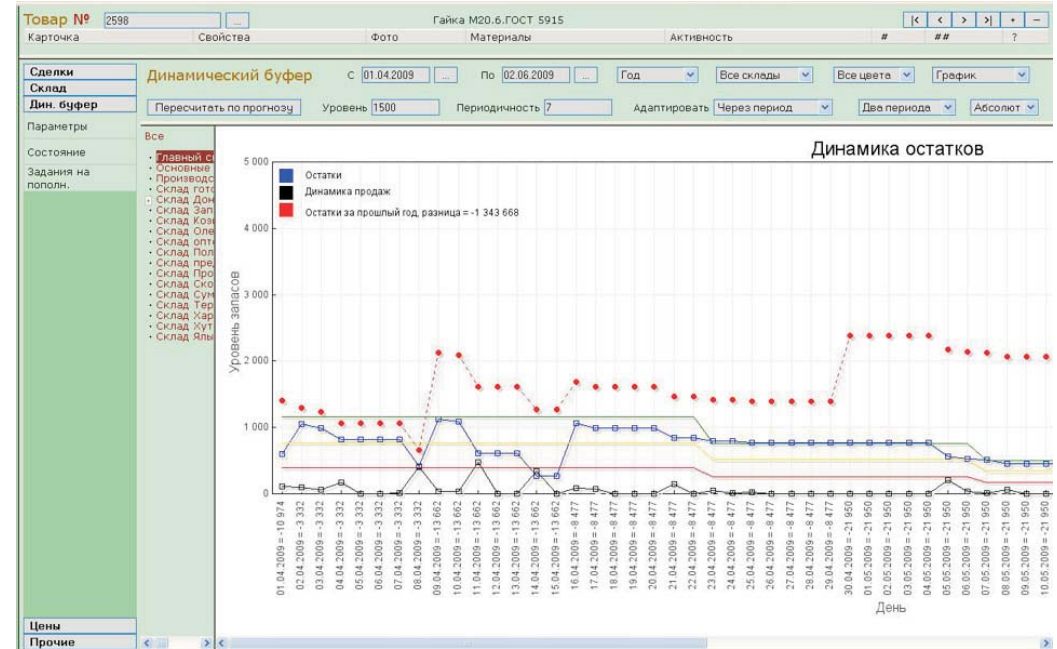
$$TVD = (\text{average daily sales}) * (\text{sale price} - \text{planned cost}) * (\text{number of days in a black zone}) \text{ denominated in hryvnya or nominal dollars};$$

$$IVD = \text{sum of products of warehouse stocks (exceeding replenishment level) times their planned cost per each day of such excess denominated in hryvnya or nominal dollars};$$

$$T = \text{period} / (\text{sales volume for the period} / (\text{average daily balance for the period})) \text{ in days.}$$

In case of proper dynamic buffers management, these parameters should decrease in each subsequent period of the analysis and under the best case scenario TVD and IVD shall tend towards zero.

The simulator allows of investigating the process in the graphic mode of stock balance regulation with the preset buffer parameters. Data may be entered into the Simulator manually or automatically using statistics of the commodities movement at the chosen warehouse for any period of time. Dynamics of shipments and warehouse balance may be displayed in the Simulator in the absolute value and in per cent terms. The simulator allows of analyzing and improving the algorithm of stocks replenishment and establishing the buffer initial size.



## Motor transport and cargo delivery management

The System allows of managing the cargo delivery by own and rented motor transport. Processes of delivery routes formation, motor transport loading taking into account volume and weight of the transported commodities are automated. History of the vehicles operation with a breakdown into the trip tickets is recorded. Travelling expenses, including with use of the rented motor transport may be credited to the cost of the commodities and services. The System envisages registration of the transportation services provided to the third parties.

**Trip tickets.** The trip ticket card contains necessary requisites: data about the car, trailers, and organization, to which they belong, drivers, and the forwarding agent. It also records information about departure and arrival date and time, time en route, mileage and fuel in the tanks (two types of fuel may be reported), and refueling en route. It is possible to define the cost of fuel and consumption planned, rate-setting mechanism of the

driver or services provided to the third party (by working hours, trips, or mileage). Fuel may be purchased and written off on the basis of the trip ticket data.

**Refueling.** The System provides for registration of all fueling up instances during the trip. For each fueling up instance it records the date, payment type (for cash, by card, or non-cash method), type and quantity of fuel, and the amount and currency.

**Travelling expenses.** It is possible to record any expenses in any currency associated with the trip ticket – daily allowance, fuel cost, amortization, customs expenses, salary of the drivers and forwarding agents, etc. Special option enables to calculate certain expenses in accordance with the trip ticket with regard to the established standards (for repair, amortization, fuel, etc.).

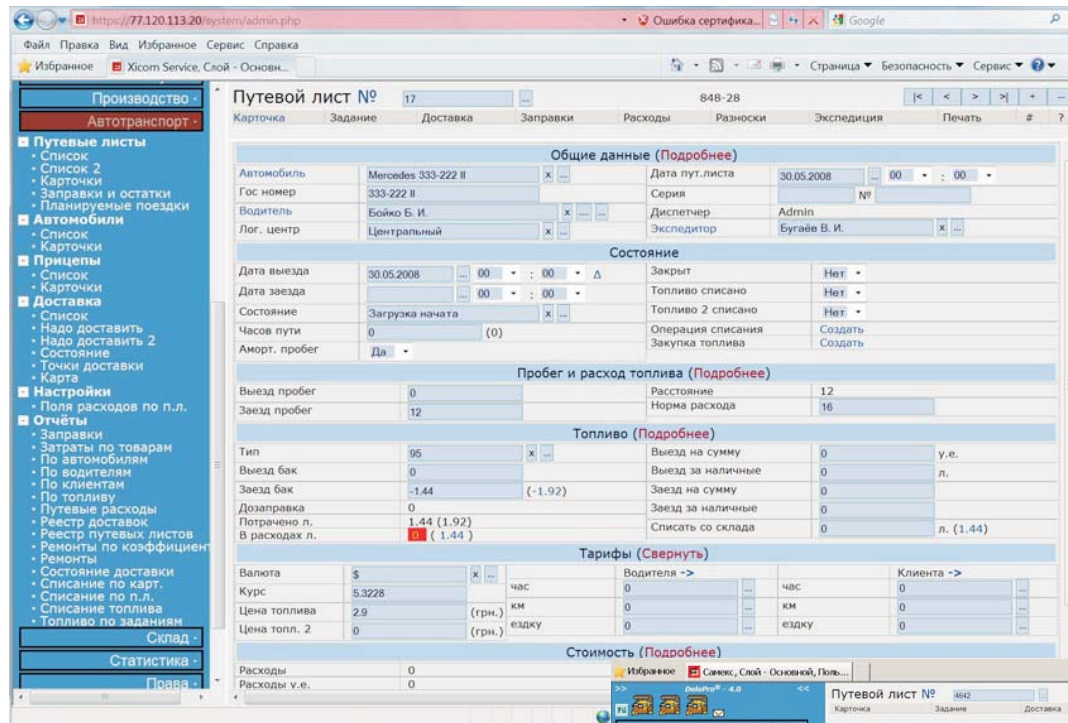
**Fuel writing off.** Fuel is purchased and credited to the

warehouse (while refueling with cards – in virtual way), and then written off to the trip tickets according to the standards or expenses of the trip ticket. Fuel may be written off for each trip ticket separately or in accordance with the period results.

Travel expenses (daily allowance, fuel cost, amortization, customs expenses, salary of the drivers and forwarding agents, etc.) may be recorded in any currency.

**Driver's task.** Any number of driver's tasks may be linked to the trip ticket. Each task records the organization, which requested the services rendered, forwarding agent, nature of cargo, loading and unloading address, number of trips, distance, tariffs, type of fuel, etc. Order for the transport service sale to the third party organization may be automatically generated on the basis of task.





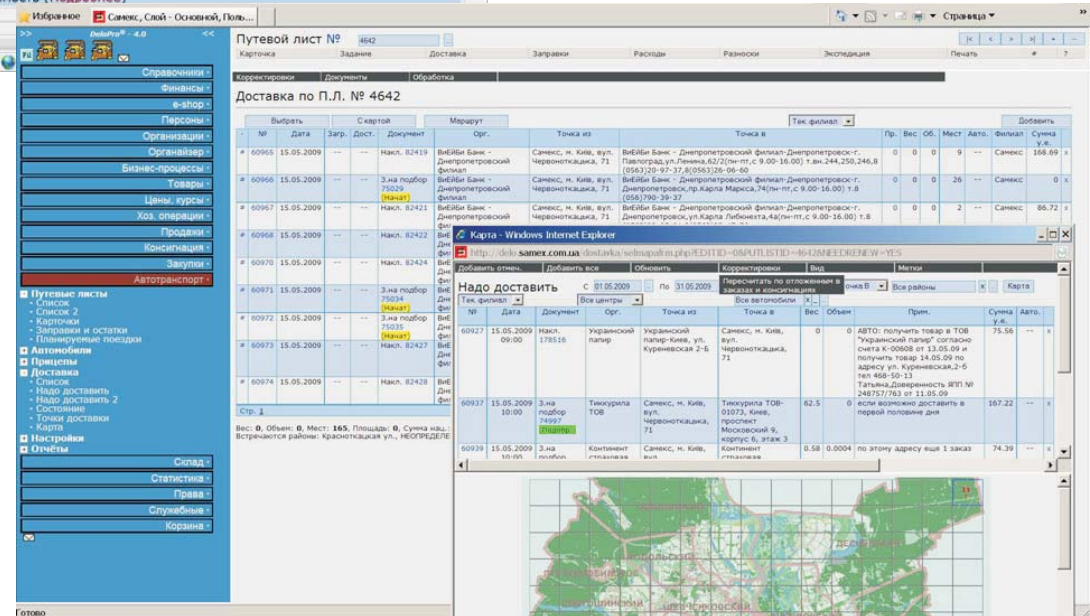
Delivery location has its name, business address and is linked to the counterparty and delivery area. In the process of program operation, database accumulates information on the distances between delivery locations, which is used for preliminary estimation of the motor transport mileage with regard to the concrete trip ticket.

**Requisitions for delivery.** They may be generated from various objects of warehouse and operational logistics – requisitions for selection and kitting, requisitions of buyers and to suppliers, orders for sale and purchase of the commodities. They contain information about loading and delivery locations, delivery date, weight and cargo volume, car, etc. Requisition accumulates information about the trip ticket and actual delivery of cargo to the addressee in the process of delivery accomplishment.

**Formation of trip tickets and routes.** The dispatcher analyzes by means of active reports the received requisitions for delivery with a breakdown into delivery locations and areas and on their basis forms trip tickets taking into account current loading of the motor transport. The System envisages possibility of formation of the motor transport movement route and task to the driver

Each task may be attributed to the objects - bargains on sale and purchase of the commodities, intra-company movements, and requisitions for the commodities kitting for the purpose of the subsequent travelling expenses allocation to the commodities cost.

**Delivery regions and locations.** The system allows of generating the corporation logistics area: list of the delivery locations combined in the optional delivery areas. Differential co-ordinates X and Y are specified for each delivery area. Delivery areas and locations are displayed in the form of a pseudo-map, which enables the dispatcher to optimize the trips and delivery routes by including the locations in the close delivery areas to the trip tickets thus forming the appropriate the task to the driver.



with regard to each trip ticket. When the commodities under the requisition are delivered to the destination, it establishes the label (thus providing for notification of the responsible employee for bargain about the same).

**Group printing of the documents.** Package of necessary documents: invoices, material issue notes and tax invoices, orders for warehouse release, CMR notes, trip ticket, etc. may be printed out on the basis of the formed trip ticket.

**Management of car load.** The system allows of calculating the volume of the loaded commodities in various units of measurement (boxes, palletes, etc.), and indicating commodities loading priority in the requisition for kitting. Priority may be specified in the requisitions for delivery as well. The System provides for opportunity to generate loading note on the basis of this information from the trip ticket card that includes

the list of commodities with indication of the transported cargo volume sorted in accordance with delivery priorities and commodities in the associated documents as grouped by the loading warehouses. The commodities, which presumably would not fit the truck, shall be accounted for separately. The special report allows of forming schedules of the trucks loading and unloading.

**Forwarding.** The System affords opportunity of recording cargo deliveries by the forwarding company with formation of the requisition-contract. For this purpose, the trip ticket records data of the forwarding and transportation company, freight amount to the border and in the territory of Ukraine, intermediate delivery locations, information about loading, customs clearing, and unloading, etc. Transportation service purchases are created on the basis of these data with aligning with the trip ticket expenses.

**Multi-branch trip tickets.** The System enables to manage cargo delivery between the corporation branches and mutual settlement of accounts for the transportation service provision by creation of orders for the transportation services sale to the branches, where cargo is delivered on behalf of the trip ticket branch, as well as purchase of the transportation services in the delivery branches with their aligning to the trip ticket expenses.

## Supply Chain Management. Operational logistics

The main goal of any supply chain is to ensure availability of the necessary commodities in the required quantity in the requested place and during required time. The System allows of inclusion of the corporation members, buyers, and suppliers in the operational logistics cycle. While using the System's analytical potential, dynamic buffers management mechanisms, it is possible to plan supplies, co-ordinate production, delivery, and storage of the commodities.

**Operational logistics Objects.** In order to manage information flows in the supply chains deliveries, number of the System's objects are used: requisitions and orders of buyers, requisitions to suppliers and inquiries about the delivery conditions, condition of the commodities delivery from suppliers and purchase, production orders, requisitions for warehouse replenishment, kitting, selection, and delivery of the commodities. Reservation and forecasting system is utilized for management of the commodity flows. User-defined number of necessary documents may be aligned with all the logistics objects.

**Transformation and consolidation of the logistics objects.** The System affords opportunity to create the logistics objects from other objects by copying their specifications with introducing necessary changes (counterparties, prices, currency, etc.). For example, requisitions for delivery from

corporation members (branches, divisions) may be consolidated in the summary requisition and then divided into requisitions to the suppliers. Purchases may be created from requisitions to the suppliers, etc. Depending on the business specifics, users may independently determine the structure and mechanism of the logistics chain functioning.

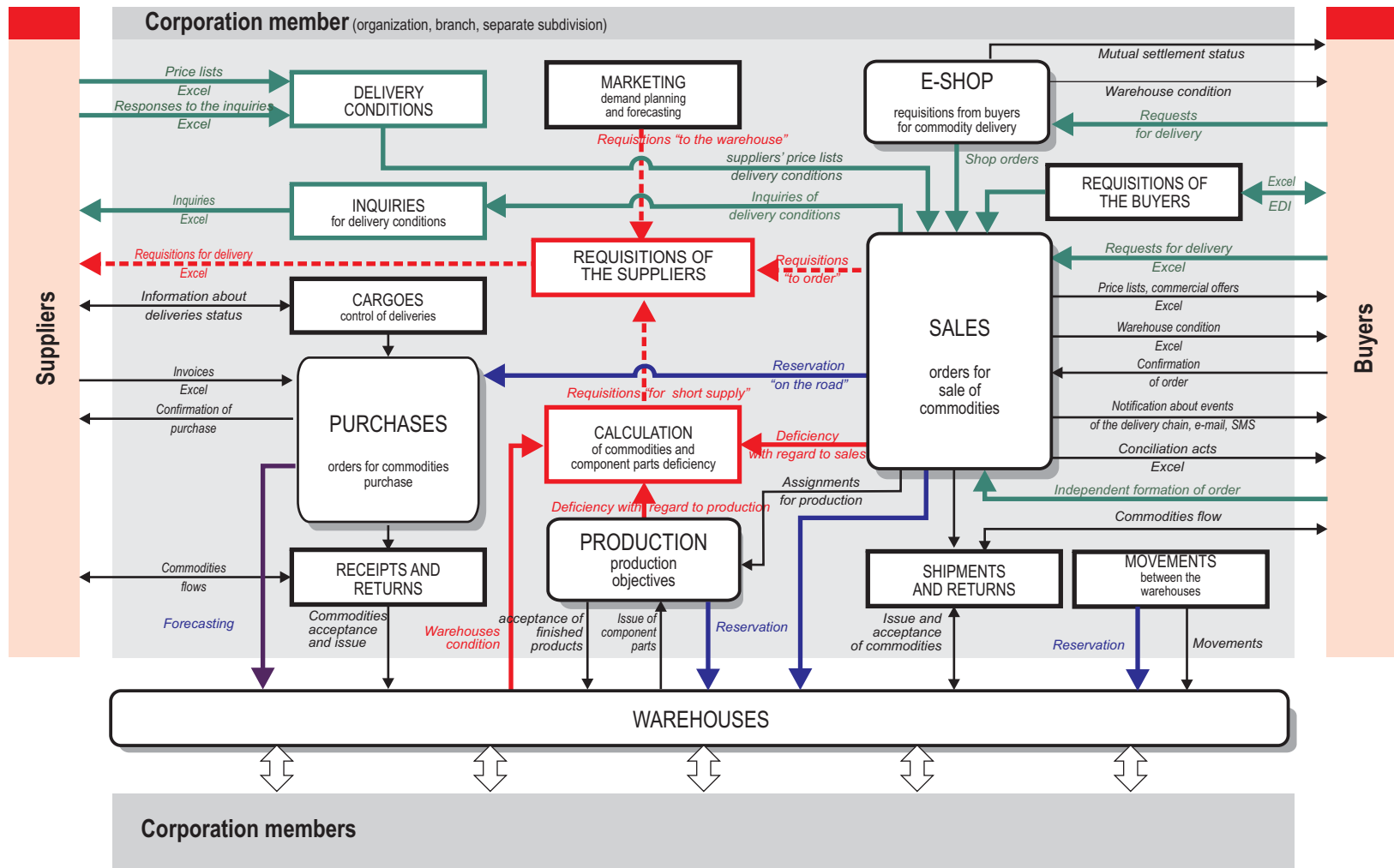
**Commodity condition.** In accordance with its movement in the cycle of operational logistics, the commodities may be in reserve (for orders for the commodity sale, consignment orders, production orders and requisitions for kitting), in work in progress, in consignment, rejected, or be "forecasted" under the guaranteed purchases. These commodity conditions are used for determining the quantity available for sale as well as for deficiency calculation.

**Reservation of the commodities.** System users may reserve the free commodities for sale in warehouses accessible to them under orders of buyers, production orders or with regard to the requisitions. The commodities may be reserved, which receipts with regard to the guaranteed purchases or production orders are "forecasted" in the chosen warehouse by creation of virtual warehouse inventory cards. It allows of providing for reservation of the commodities "on the road " and "in production". Creation of requisitions for reservation is available with distribution of

reserves by the supervisor.

**Commodities delivery "to the order" with unique characteristics.** Depending on the company size, its structure and specifics, various organization of the delivery business process "to the order" is available. Clients' requirements may be first recorded in the requisitions of buyers. On the later stages, orders for the commodities sale may be created from the requisitions of buyers. The commodities, which are stored in warehouse, may be shipped in accordance with orders, and the rest is posted for delivery. Requisitions to the suppliers are formed on the basis of deficiency under orders. Upon delivery acknowledgement, commodity purchases may be created from the requisitions to suppliers. All the objects of this logistical chain will contain information "to whom" as well as unique properties of the delivered commodities batches (colour, size, etc.). While receiving the commodities under purchases at warehouse, they may automatically enter the reserve of the relevant orders for sale of the commodities with automatic notification about this event of the interested users, including buyers.

**Serial numbers, certificates, licenses.** Movement of the commodities may be aligned with their serial numbers (certificates and other documents), which enter the database at any stage of the logistical chain: during purchase, production, at



warehouse, sales. Information about the commodities serial numbers may enter all the documents formed therewith. It is possible to view the history of movement of the commodities with concrete serial number.

**Sharing of resources.** The system allows of using warehouse stocks as the common resource of corporation. It affords opportunity to manage purchases in centralized manner and maintain minimum required level of warehouse stocks both at the corporation level and in the geographically dispersed divisions. Mechanism of the transfer prices allows of managing

profit redistribution in the corporation.

**Operation chains performance.** Recording of actual movement of the commodities and money resources in the corporation along with documenting of these operations may be accomplished by way of automatic formation of operation chains

in accordance with special templates. Users may "with only one key stroke" automatically generate groups of the associated accounting objects – bargainss, BTs, warehouse bargains and documents in various corporation members in order to realize certain business purposes – transfer of the material assets, performance of mutual settlement of accounts, etc. Operations chain is an independent accounting object, which specifies parameters, describes steps, programs actions, and initiates chain creation, provides for viewing of all associated objects and documents, and which affords an opportunity to completely change it.

**Management of shops network.** The system allows of organizing operation in on-line mode of network of the retail shops, which are included in the corporate delivery chain. Here, the shop may function under one legal entity (individual business entity) or various entities. Each shop is a corporation member and has warehouse (commodities on sale), which replenishes in centralized manner in the course of sale. It allows of supervising movement of money and commodities in the shop in real time mode, effectively managing commodities line and delivery, providing for sales persons financial responsibility, and minimizing various wrongdoings.

The System envisages special object – *retail order* for servicing clients in the sales area, which permits to promptly issue an order with use of the catalogue or bar code scanner, ship the commodities with automatic writing off from warehouse, accept money, and print out the sales voucher. Cash register may be employed where applicable.

**Trading networks and network clients servicing.** The system enables to organize effective work of the distributor with retail networks and to facilitate servicing of the large network clients offices (banks, insurance companies, etc.). For this purpose, the System establishes buyers networks with one owner (parent organization), which controls other network organizations. In order to form network orders, the System employs requisitions of buyers, which may be formed manually, by import of Excel format files, or with use of the electronic data interchange system (EDI)..

While creating new requisitions, the System automatically inserts the prices and discounts in accordance with the client's profile, responsible manager, and generates relevant notification

for him / her by the internal mail. In addition, the System provides for automatic reservation of the commodities with regard to the buyer's requisition. User may create orders for the commodities sale and requisitions for selection and delivery of the commodities on the basis of the buyer's requisitions. It is possible to generate the electronic EDI-notice to the buyer about commodities readiness for shipment. EDI system enables to obtain the buyer's confirmations about acceptance of the commodities and material issue note with entry about accepted quantity. In case of the quantity mismatch or misdescription detection, the System allows of modifying the order for the commodities sale, creating required BT, and conducting warehouse transactions along with generation of the modified complete set of the shipping documents.

The network clients enjoy transparent reporting system allowing of supervising the mutual settlement of accounts. Owing to automation, one operator is capable of managing requisitions from four to five large corporate clients with several thousand divisions.

**Management of the sales representative teams. Mobile sales.** The system permits to manage servicing of the retail shops by sales representatives. The user develops schedule of each shop visits by the sales representatives responsible for certain commodity groups. Each sales representative is responsible for a mobile warehouse (truck), which facilitates the commodities sale. Management of the accounts settlement and of logistics of the commodities delivery to shops, stocks replenishment and mobile warehouses balance calculation (with a breakdown into products range) are automated. Specialized module allows of forming travel card of the sales representative with indication of shops, which he or she shall visit. During the working day, user enters there data received from the agent for each shop: shipments and returns of the commodities, payments and refunds, requisitions of shops for the commodities delivery, requisitions of the agent for mobile warehouse replenishment. Upon the daily report confirmation by sale representative, the module automatically forms:

- orders for the commodities sale to shops based on the agents' shipments for a day, and upon their formation – shipment of the commodities from mobile warehouse; it also allocates payments for the shops' orders;
- orders for the declared commodities sale in shops, and upon their formation – requisitions for the next day delivery

and requisitions for commodities selection in the central warehouse;

- combined instruction on shipment and package of shipping documents for each shop in accordance with delivery service route for the next day;
- requisitions for kitting for replenishment of the sales representative's mobile warehouse.

Besides, the module calculates inventory at the mobile warehouse (which may be inventoried), current accounts receivable of the shops for subsequent reconciliation by the sales representative as well as average weekly commodities sale for each shop with a breakdown into the products range.

**Exchange of electronic documents in EDI, XML, and Excel format.** In order to organize effective communications with suppliers and buyers, System envisages exchange of necessary documents in electronic format: requisitions of buyers, price lists, offers, documents for bargainss, etc.

**Electronic commerce E-SHOP.** Partners in the supply chain may co-operate with corporation members using the personified on-line access to database via Internet network or in off-line mode via E-SHOP subsystem. System provides for synchronization of data exchange with the main corporation database. Information about mutual settlement of accounts is accessible to partners; they may independently plan deliveries and receive necessary commercial and technical information.

## Direct cost accounting in the operational logistics cycle

Developed mechanisms of the direct cost account along the whole added value creation chain permit to determine marginal income and profitability of sales with breakdown into various centers of profits beginning with the company as a whole and to the concrete bargains and the commodity.

**Direct cost accounting in bargains.** Commodities prime cost and sale price are formed in bargains on the commodities purchase and sale. Bargains contain specifications of additional expenses. These additional expenses are allocated for the commodities from the bargains specification (denominated into the primary units of measurement) with use of required method (in accordance with volume, weight, quantity, or invoice price). It is possible to specify, for each additional expense, whether it creates the commodities cost only for management accounting purposes or also increases its business accounting cost. The System provides CCD entry for import purchase for the purpose of allocating the taxes and

charges to the prime cost of the respective commodities from the purchase specification.

**Direct cost accounting for the commodities delivery and movement.** Travel expenses specification records all the expenses associated with delivery in the user-defined currency and separated by analytics. The total amount of expenses with regard to trip ticket in the management accounting currency is allocated for the delivered orders, purchases and inter-warehouse movements, and further for the commodities from their specifications.

**Accumulation of the commodities cost in warehouse inventory cards.** The commodities cost in national currency (for business accounting) and in the currency of the management accounting (actual) is stored in documentary and operational warehouse inventory cards. It is possible to analyze, by means of the special reports, the commodity prime cost structure with a

breakdown into analytics.

**Prime cost "retroactive" updating.** Prime cost may be corrected at any moment irrespective of movements recorded in the warehouse inventory card. For this purpose, necessary additional expenses are accrued in the respective bargains to activate an option that makes changes in all associated warehouse inventory cards.

**Marginal income from the commodities (services) sale.** It is calculated as a difference between the commodity price in the sales order (taking into account rendered discounts and the direct costs credited to the commodity) and the commodity actual prime cost from operational warehouse inventory card. Marginal income may be calculated for each financial responsibility center (FRC): the commodity or group of commodities (brand), department, branch, sales outlet, etc.

## Financial management

The system contains necessary tools for conducting the accounting of corporation financial activity.

**Bank and cash office.** The system allows of cash/ money accounting on the corporation settlement accounts and cash offices separately for each currency. Processes are automated of information import-export from the bank statement (for various electronic banking systems), money transfer from one account to another, and currency purchase. BTs that are associated with money flows may contain allocation of the amounts for concrete bargains (and inside bargains - for the commodities).

**Requisitions for payment.** In order to manage monetary funds expenditure, specialized object is employed: requisition for payment which describes the user who has created it, desirable amount, currency, type of the associated BT, expenditure item, payment substantiation, organization or the person – payment recipient, and the desirable payment term. Any documents may be attached to requisitions for payment (accounts, contracts, etc.). Requisitions for payment may be associated with purchases or sales (in the course of payment of commission fee and bonuses, refunds). This information is accessible to the accounts managers who make decisions on payment. Payment managers may be assigned maximum sum of the signature.

№	Дата	Организация	Операция	Сумма	Вал.	Р/с	Категория	Ресурс	Прим	НДС	№ док.	Б
2074	30.01.2009	Xicom	Оплата товаров по закупке	-300,02	грн.	банк Гривня	Закупки	--		50,00	2074	+ x
2064	27.01.2009	Xicom	Возврат денег по заказу	-500,00	грн.	банк Гривня	Заказы	--		83,33	2064-111	-- x
2062	26.01.2009	Xicom	Оплата товаров по закупке	-100,00	грн.	банк Гривня	Закупки	--		16,67	2062	+ x
2060	26.01.2009	Xicom	Приход денег по заказу	100,00	грн.	банк Гривня	Заказы	--		16,67	2060	+ x
2056	23.01.2009	Xicom	Выплата компенсаций нам	1,00	грн.	банк Гривня	--	--		0,17	2056	+ x
2048	20.01.2009	Xicom	Покупка валюты	-500,00	грн.	банк Гривня	--	--		83,33	2048	+ x
2038	14.01.2009	Xicom	Приход денег по заказу	557,16	грн.	банк Гривня	Заказы	--		92,86	2038	+ x
2053	10.01.2009	Xicom	Приход денег по заказу	3 027,01	грн.	банк Гривня	Заказы	--		504,50	2053	+ x

Текущий остаток на счете банк Гривня **464 353,61** (По всем филиалам 441 619,21)  
Суммарный долг по закупкам составляет **82 789,44**

Всего	2 285,15
НДС	380,87

Requisitions for payment shall be consolidated and approved with indication of the permitted payment amount at the level of branch and company as a whole. With use of the approved requisitions, the accounts department automatically forms payment orders to the bank for payment. Not approved amounts may be transferred to the new requisitions.

Mechanism of requisitions for payment may be employed for formation of the payment schedule.

**Tax documents.** Software helps form tax documents (invoices and correction calculations) as well as maintain the registers of received and issued tax invoices, and cargo customs declarations (CCD). Both daily numbering of the tax invoices (that permits to issue them retroactively) and continuous one is also possible. Tax invoice specification is formed at the moment of selection of the tax event out of the list sorted in accordance with the time of their occurrence. Here, the tax invoice amount adjusts automatically to the event amount. Correction calculation for the tax invoice may be formed manually or on the basis of the return invoice specification. The System provides for group printing out of tax invoices.

**Expense reports.** For accounts settlement with accountable persons specialized BTs are used: money disbursement to materially-responsible person and Expense report, which are mutually balancing reports. Any expenses specification may be directly generated in the expense report. Disbursed amounts may be allocated for payment of purchases (and in case of purchases - for the commodities) or to the trip tickets. There is a mechanism of expenses proving with regard to the expense report by the supervisor.

**BT allocations.** BT posting log enables to view the list of

postings (allocated initially, finally, or all of them) with regard to each account for the chosen period of time in accordance with the national standards or by GAAP methodology. Users may independently adjust the mechanism of BT allocation, account charts and reports with regard to the posting log. Various reports: balances, cash flow, resources, financial results, own capital, etc. are formed on the basis of the posting log.

**Fixed assets.** The System envisages an opportunity of accounting of the fixed assets (FA) and intangible assets (ITA) for the groups with a breakdown into objects. All operations: commissioning, accrual of depreciation, repair and modernization as well as FA liquidation are accomplished on the basis of corresponding BTs and recorded in an object card. It is possible to keep the history of FA operation (for example, for motor transport - with a breakdown into trip tickets).

**Bills.** Accounts may be mutually settled with use of the bills. The bill card indicates all necessary requisites and records BTs associated with it: reception, transfer, payment, and arrival of money. The balance of the bill is recalculated by results of the operations performed with it. Discount is determined in accordance with a difference between the receipt and transfer prices.

**Credits.** Obtained credits are recorded as an independent object containing terms and conditions of their provision (pledge, currency, interest, term to maturity, etc.) and repayment (method of interest accrual, etc.). The System provides opportunity to form credit receipt and repayment schedules as well as payment of interest. It also records the history of contacts with the bank in respect of the given credit as well as history of its receipt and repayment with a breakdown into the corresponding BTs.

**Price or quantity corrections.** The System facilitates, with use of BT with the same name, correction of quantity and prices in BOs for shipment, receipt, kitting and movement of the commodities. It is possible not only to change quantity and price for each position of the corrected document but also to make commodities replacement. In accordance with price and quantity correction BT, it is possible to exercise all necessary warehouse transactions and automatically generate correcting calculation for the respective shipment tax invoice.

**Settlement of accounts** with the counterparties, where mutual debt exists, are performed in the System with use of the same name BT. This operation allows to select purchases and orders of the counterparty, who encounters debts, and generate the mutual settlement amount. This BT forms the balance for the bargains with this counterparty; it is possible to print out the homogeneous obligations offsetting statement with its use.

**Budgeting.** The System provides for organization of the budgeting process with use of business accounting and management accounts charts as well as on the basis of the income and expenses items. In the latter case, the budget is actually implemented in accordance with the cash method. At the moment of execution of BT that is associated with the cash flow, it connects with the respective income and expenses category, and its amount allocates to the financial responsibility center (FRC). User may view budgets by the categories or resources with a breakdown into the months and years. The System provides for formation of the planned indicators in accordance with results of previous periods or they may be entered manually; it is possible to obtain details for each figure with a breakdown into BTs.

## Corporation human resources management

### Persons and employees

The System distinguishes between the notion of person (private person) and employee. Persons card file registers necessary information about private persons, with whom corporation employees contact. Each person may be a contact person of the various organizations for the corporation workers. The organization card presents the list of its employees (contact persons).

**The person status** – contactor, candidate, or employee is defined separately for each corporation member. The person may take one primary place of work and any number of part-time positions in the corporation.

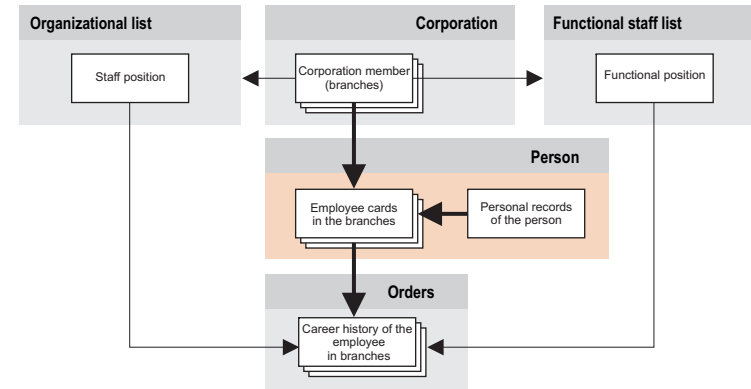
**The person card** contains a set of obligatory fields as well as unlimited number of adjustable sections and personal record parameters. It allows of storing user-defined documents –

photos, instructions, resume, copies of diplomas, certificates, etc. it enables printing out of the documents in accordance with templates (questionnaires, etc.). In fact, it is analogue of the personal record of the private person, which is to be entered into the System just once.

**The employee card** is created within the person card if this person is considered as candidate for a vacant position in the

enterprise. Here, the person gains the status of candidate. The person may be candidate for vacant positions in various enterprises of the corporation.

The person gains the status of the employee at the moment of issuing of the personnel order for his /her acceptance for work. The employee card, in the course of their work at the enterprise, stores the history of their career in the form of the personnel orders list (acceptance, promotion, replacements, changes of the labour agreement essential conditions, encouragement and punishment, dismissal). The System enables printing out П2 card as well as other necessary documents from the employee card for each branch.



## Organizational and structural planning

**Organizational and functional structures of the corporation.** The System facilitates creation and keeping the used-defined hierarchical corporate structure. It also enables creation of parallel functional structure for combining the corporation employees into target groups in accordance with various attributes – functional, organizational, project, budgetary, etc.

**The branch** is the independent corporation enterprise. Each branch may have its functional table and unlimited number of the staff lists (SL), one of which shall be operational one. SL consists of a set of positions grouped by departments.

**The department** is a component part of certain SL or functional table (FT) of the branch. The department is linked with the departments directory (names of corporation structural divisions), with the superior department, and with supervision position of other department (for personification of the departments subordination). Individual users' access rights shall be specified for each department.

**The position** connects with the certain SL department and the element of corporation position title directory. The position connects with supervisory position in the department. The position features a number of parameters – type, salary range, base salary, personal bonus, additional conditions, number of rates, working experience profile (set of the experience types for this position), etc. Position is characterized by set of rights, duties, and responsibilities as well as developed requirements for the candidate.

**Organigrams.** The system provides for organigrams formation for the corporation functional and organizational structure:

subordination tree of the departments and positions (with displaying the persons occupying these positions).

**Labour Compensation Fund (LCF) planning and workforce requirements.** The system allows of consolidating corporations

SL to form the vacancies lists with a breakdown into branches. It is possible to perform the group operations with SL positions: changes of salaries, tariffs, and personal bonuses, etc. Vacancy lists form with a breakdown into the branches.

Должность	Отдел	Доп. усл.	Ставок	Зан./Вак.	Оклад
11 Бухгалтер	Бухгалтерия	--	4	2 / 2	840,00 x
30 Вантажник	Склад	--	2	1 / 1	500,00 x
4 Выходной/Директор	Управленческий	--	1	2 / 1	2 954,00 x
21 Водил.	Сетевая лаборатория	--	1	1 / 0	500,00 x
Склад					1 600,00 x
Снабжен.					1 300,00 x
Служб.					1 000,00 x
Сборка					900,00 x
Сетевая лаб.					945,00 x
Экономист					650,00 x
Свойства					1 100,00 x
Приказы					950,00 x
Кандидаты					900,00 x
Общие данные					700,00 x
Детали					800,00 x
Детали					887,00 x
Детали					800,00 x
Детали					764,00 x
Детали					0,00 x
Детали					450,00 x
Детали					753,00 x
Детали					750,00 x
Детали					28

## Personnel record management

**Orders.** The program allows of issuing personal and group personnel orders as well as enterprise orders. An order status: draft copy, active, temporarily suspended, and archival, is used for the control of vacancy condition and person status. The program supports control of the orders expiry dates that are associated with employees' movement (vacation, business trip, etc.).

Order texts are formed by way of selection of the necessary formulation from individual set of typical formulations for each order type. The order card permits to modify the text and its final version remains stored in the database. The orders are printed out in accordance with the typical templates, which are specified in HTML-editor for each branch.

**Work experience and career.** Employee card obtains data from the orders associated with change of the labour contract terms and conditions (change of the salary, position, structural

division). It also accepts the career history (place of previous work) or total employment history with a breakdown into the types of experience (scientific, government service, etc.). At later stages, total employment length is calculated on the basis of the position occupation length profile in consideration of the relevant coefficients.

**Worker's duties** and compensation package. Person card contains all its functional duties and corporation personnel orders on (all of them, active, and full history) as well as aggregate salary amount that takes into account all part-time jobs, established increments, and extra payments in all branches by full-time and functional positions.

**Time-sheet.** The program records information about sick-lists, absences, overtime work, etc. necessary for salary calculation. Time-sheet forms automatically on the basis of work schedule planning and of a workers payment schemes with the

subsequent input of deviations for each working day. Time-sheet data for each worker may be exported to the program for wages calculation.

**Leaves.** Planning and calculation of annual primary and additional leaves is accomplished in consideration of not used leave days for the previous period on the basis of the leave schedule. Program facilitates, by means of the special report, generation of the leave schedule in the form of Gantt's chart for any structural division of the corporation.

**Critical parameters monitoring.** The System utilizes various tips and reminders associated with the personnel. For example, control of the validity period of orders, contracts, assignment accomplishment, etc.

## Personnel selection and training

**Work with candidates.** The program provides for recording resumes and vacancies (with possibility of their placing on the corporation web-site) as well as independent completion of the electronic questionnaire by the candidates. Database records results of interview with the candidates in the form of assessment of their professional competence level, entrepreneurial and psychophysical parameters; at a later stage those data are used for selection of candidates for the vacant positions and formation of a personnel reserve taking into account established requirements for the given position.

**Selection of candidates for a vacant position.** The system allows to store in a database official duties, results of

certifications, testing, and improvement of the employees' professional skill. These results are presented in the form of an unlimited set of properties of business qualities, skills, knowledge and abilities, etc., estimated on any scale in points. Similarly, in a position card the list of requirements to the candidate is fixed and the list of employees or the persons meeting these requirements is automatically formed.

**Conduct of trainings and certifications.** The System automates record of the training events starting from participation of employees there, development of the training calendar to registration of their attendance by the employees, assessment of the training results and personnel certification.

**Remote training of employees.** The System provides for publication in the special section of any educational information (books, reference books, instructions, regulatory legal acts, etc.) accessible to the users. It also fosters development of tests, their publication, and personal assignment to the users. There is a system developed for calculation of correct and wrong answers.

## Motivation of the personnel. Bonuses

Motivation of the personnel in accordance with actual performance results. Specification of algorithm for the bonuses calculation for each user. Mounts of the economic transactions associated with the company employees performance (shipments, payments etc.), accounts receivable as well as information from various objects of operational logistics (orders, purchases, etc.) may serve as basis for the bonuses calculation.

**Basis for bonuses calculation.** Bonuses are calculated for the enterprise employees. BTs are identified for the users who, in turn, are associated with employees and structural divisions. The program allows of currency specification for calculation of

the bonuses amount. BT amounts are recalculated in this currency from warehouse currency at the predetermined exchange rate.

**Calculation table.** Common calculation table serves for the bonuses calculation, where amount calculation algorithm is programmed for each employee (line of the table) in each of its calculation columns. Here, a number of functions are used that from database information necessary for calculation.

The calculation table structure (its columns) is programmed in the entrance table. Whenever necessary, it is possible to specify

the mechanism of charges and deductions of various taxes, alimony, etc. for each column. The user may view the results of calculation with a breakdown into structural divisions of the company.

Respective BTs are formed for payment of bonuses, which import necessary data from the calculation form. Documents – pay-lists, calculation forms, etc. – are formed on the basis of these BTs.

**Closing of the periods.** Bonuses are calculated for the periods (month, quarter, year). The user may independently form the



program for the period closing. Upon closing the period, next period opens automatically, where the carryforward amounts from the previous closed periods are carried over. The closed period stores in the archive.

## Analytics and reporting

There is a large number of reports and references associated with orders (lists, terms, personnel turnover), user-defined sections of the personal records, personnel selection (personnel reserve), structure (list of staff, staff register, lists of vacancies, salaries, part-time workers, candidates, etc.). Universal report facilitates generation of the user-defined lists of the employees (persons) selected by the user-determined complicated criteria of selection and inclusion there of necessary information from their personal records, list of staff, etc.

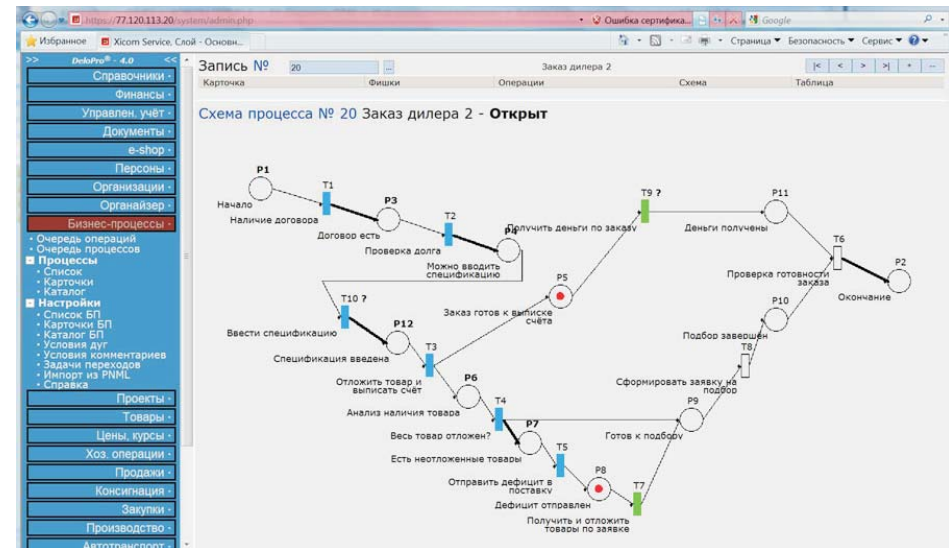
The screenshot shows a web application interface with a sidebar menu on the left and a main content area. The sidebar menu includes categories like 'Персонал', 'Финансы', 'Управление', 'Документы', 'e-shop', 'Персонал', 'Организация', 'Организатор', 'Бизнес-процессы', 'Настройки', 'Проекты', 'Товары', 'Цены, курсы', 'Хоз. операции', 'Продажи', 'Консигнация', 'Закупки', and 'Автопроизводство'. The main content area displays a table titled 'Таблица входимости' with columns for '№', 'Название', 'Тип', 'Ручной ввод', 'Всего начислено', 'Налог с физ. лиц', 'Удерж. в пенс. фонд', 'Удерж. в соц. страх по безр.', 'Удерж. в соц. страх по нетруд.', 'Начислено в соц. страх от несчаст. случ.', 'Начислено в пенс. фонд', 'Начислено в соц. страх по безр.', 'Начислено в соц. страх по нетруд.', 'Ком. налог', and 'Алименты'. A dialog box titled 'Общие данные' is overlaid on the table, showing fields for '№' (7), 'Название' (Больничные), 'Код' (Больничные), 'Тип' (Место), 'Ручной ввод' (Да), 'Всего начислено' (Нет), 'Налог с физ. лиц' (Нет), 'Удерж. в пенс. фонд' (Нет), 'Удерж. в соц. страх по безр.' (Нет), 'Удерж. в соц. страх по нетруд.' (Нет), 'Начислено в соц. страх от несчаст. случ.' (Нет), 'Начислено в пенс. фонд' (Нет), 'Начислено в соц. страх по безр.' (Нет), 'Начислено в соц. страх по нетруд.' (Нет), and 'Ком. налог' (Нет).

## Management of business processes. Workflow-system

**The Workflow-system** allows of regulating and supervising step-by-step execution of the business processes (BP) associated with various aspects of the economic activities - sales, purchases, marketing, personnel, electronic data interchange, etc. Its primary goal is to address the issue of «who, what, when, and how shall do».

BP represents itself in the System as repeating sequence of the interconnected operations and conditions of their performance. In the course of BP performance, documents, information, or assignments pass from one participant (the System user) to another so that he or she implements them in accordance with the provided procedures.

**BP Template** contains its description in Petri nets language. In order to create BP templates, the System encloses library of arches, transitions, and comments, which may be supplemented by the user. Each operation may be aligned with the addressed assignment (to pay purchase, to receive the commodities, etc.), with the users role and corresponding rights. Users, who are included in the template, may initiate BP (initiate its concrete implementation).



**BP implementation** is the System object. It records all the participants' actions in time and BP current condition. The system monitors the situations that require attention of the participants, activates them for performance of the current operations, submits the documents that require addressing, and reminds of actions, which performance period is about to finish.

The System encloses means for monitoring and management of all BP active implementation: operations queue and processes queue.

Wide use of Workflow-system allows of considerable increasing the performing discipline, lowering number of errors resulted

from wrong actions of the personnel, improving operational management of the company, and accelerating of the buyers' orders accomplishment. In addition, it provides for lower requirements for professional level of the personnel performing routine operations and, correspondingly, relevant expenses.

## Project management

The System enables to keep account of the corporation activity associated with the projects implementation. It is based on the international standards of project management (PMBOK).

The project is defined as the temporary enterprise intended for creation of the unique products, services, or achieving the planned results. Projects are planned and then implemented.

The project is considered to be completed after accomplishment of its goals as well as in case of impossibility or economic non-feasibility of its continuation.

### Basic opportunities

The System facilitates addressing the following issues:

- management of the project integration
  - storage of documents associated with the project (charter, plans, etc.),
  - monitoring and management of project activities (WorkFlow – system),
  - management of project changes (at any stage it is possible to save project condition in the archive and to re-plan the project);
- management of the project contents
  - establishment of the project phases and works hierarchical structure;
- management of the project time-frame
  - determination of the works structure and their interrelation,
  - management of the project schedule, development of the

- network diagrams and Gantt's charts,
  - calculation of a critical path, earliest and latest dates for works beginning and termination;
- management of the project cost
  - project budget and Cash Flow, calculation of the efficiency indicators, control of actual execution,
  - cost of works, resources, and the materials prime cost,
  - additional expenses under the project,
  - "retroactive" prime cost recalculation;
- management of the project resources
  - planning of human resources, workload diagrams, account of the professional skills,
  - calculation of money to pay for works with use of tariffs, links to the operations of salary payment,
  - planning of the working centers (equipment), workload diagram;

- management of the project supplies
  - calculation of needs in the materials,
  - creation of purchases,
  - issue of the materials under the project and allocation of the finished commodities,
  - redirection of the materials and half-finished products from one project on another;
- management of the project communications
  - management of the project participants,
  - dissemination of information and documents, reporting about accomplishments,
  - differentiation of the rights between the project participants.

### Project modeling

The project may be presented in the form of the subordinated projects tree. It is possible to create unlimited number of the project versions and keep the project archives. Project card contains information about the customer and contractors, time-line, conditions, budget, work schedule, subordination, etc. The System may program user-defined number of mini-databases for each project in order to record information associated with the project, for example, payments schedules, etc.

**Project model.** In order to describe it, the System provides for:

- creation of hierarchical structure of phases and project works associated with them,
- programming of the project phases and works primary characteristics,
- definition of works interrelation,

- appointment of resources for the project works performance and designation of their characteristics,
- generation of lists of the materials consumed and produced in the course of work performance,
- developing of the project work execution schedule taking into account all restrictions.

**Phases (stages) of the project** intend for formation of the intermediate goals list to be achieved during works performance under the project. Each phase may be described by the contractor (counterparty), supervisor, budget, and performance period.

**Project works** promote achievement of its goals and are aligned with the project phases. It is possible to attach any

documents to the work, define a deadline of its accomplishment (deadline), work schedule by default, methods of duration calculation: in accordance with volumes (and productivity of resources), periods, from event to other events ("hammock"), and zero duration (control point). For each work, interrelations shall be programmed with other works – restrictions with regard to its executions – "to finish after end (finish-finish)", "to finish not before the beginning (start-finish)", "to begin not before the beginning (start-start)", "to begin after end (finish-start)".

**The project resources**, programmed for each work, may be subdivided into the renewable (persons and working centers) and non-renewable (materials) ones. In the course of work performance, both purchased materials and produced as a result of other works performance may be consumed including

from other projects. The user may program individual work schedule for each of the project resources. System provides for programming of other resources (account materials, service, etc.) consumption limitations for the working centers as well as itemizing the work schedule by shifts.

**Resources hierarchical structures.** Persons and the working centers also may be presented in the form of hierarchical structures. Regarding person, this is organizational and functional structure of the company. Working centers may be structured in accordance with functional, territorial and organizational attributes.

**Types of works and their aligning with resources.** All works under the project are divided into types of works. Types of works align with the resources by means of "types of work – persons", "types of work –working centers", and "working centers – persons" matrixes. Matrixes also establish priority of the resources allocation and their "compatibility".

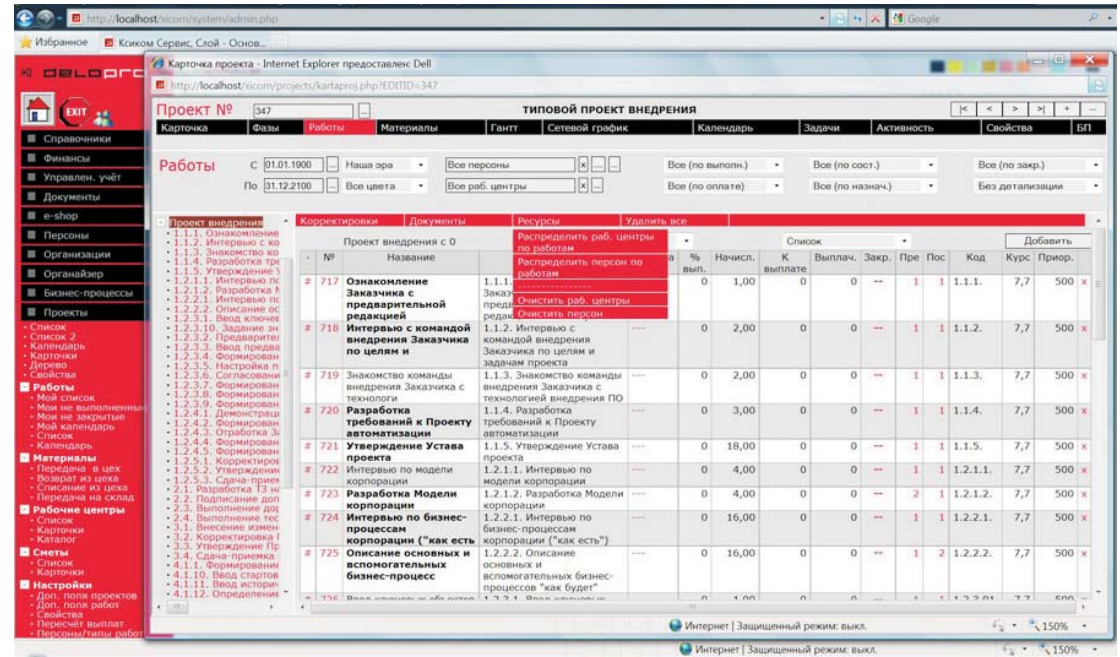
**Allocation of resources.** It may be performed automatically with use of aligning works and resources, allocation priorities, as well as work performance periods, schedules of resources work, and their load. This being the case, persons may be appointed first followed by the working centers, and vice versa. The resources may be allocated both before and after formation of the project schedule.

**The project schedule.** Method of critical path that assumes absence of restrictions on resources is used for designing the project schedule. The program accounts for the principle of the schedule formation ("period from the beginning" or "period from the finish"), planned dates of the project start and finish as well as resources load schemes. Upon introducing changes to the project work characteristics, its schedule is automatically recalculated.

**Personification of access rights.** The System enables to program access rights of users for each project.

**Workflow-system.** The network diagram displays all works of the project and alignment between them with allocation of a critical path and control points. With its help, the project manager may carry out monitoring of works and change their status (approved, in progress, accomplished).

**Document circulation under the project.** The program provides for registration and storage in any formats of the



**Resources load.** Work load of the persons and working centers may be viewed with a breakdown into works hierarchical structure over the selected time range with grouping in accordance with dates and aligned resources. Various characteristics of works may serve as filters. Daily workload for each resource may be viewed in the works calendar.

documents associated with the project – photos, drawings, documentation, etc. it is possible to establish alignment among the documents and their subordination as well as performance period and responsible person. The System ensures mechanism of the documents signing and execution.

**CRM-system.** The corporate bulletin board may be used for communication within the project groups. Internal mail may facilitate creation of messages for the project participants with read notification. Notifications about certain type of events occurrence may be sent by internal mail or to the specified e-

**Gantt's charts.** They form automatically in accordance with the project schedule by phases, persons, or the project working centers. While forming with a breakdown into phases and project works, the diagram highlights the critical path control points and works, alignment between works as well as allocated resources. Those parameters may be itemized by weeks, days, hours, and minutes.

mail address as well as in the form of SMS to a mobile phone. The system of reminders allows of creating the notification about forthcoming event at appointed time with the required periodicity.

**The organizer** permits to manage working time and employees' workload. The project manager is able to promptly and effectively co-ordinate teamwork, assign tasks and supervise their accomplishment. Within the scope of the project, the System records history of negotiations between its participants, customer, and counterparties. It also provides for planning and

implementation of events under the project. The incidents management system with possibility of their routing allows of managing horizontal interaction of the project participants. The personal notebook enables user to make notes.

**BPM – system.** It facilitates automation of the project management processes: interconnected actions (operations),

which fosters exchange of documents, information, or assignments among the participants for their carrying out actions in accordance with a set of rules of practice to be followed for the purpose of achievement of the certain preset results. Such processes involve initiation (specification of the purposes, assignments, and project limits, definition of the project phases and Charter adoption), planning (works,

resources, finances), execution (interaction of resources for performance of works), monitoring and management as well as project completion (acceptance of separate phase works and the project as a whole). Where certain process initiates, the System monitors correct (in accordance with the programmed transition conditions) accomplishment of all operations performed automatically or by the project participants.

## Economy and economic activities under the project

**Economic activities.** Various software objects may align with the project: budget estimates, bargains on sale and purchase of the commodities, production objectives as well as all economic operations associated with them. Those are shipments, returns and receipt of the commodities; proceeds, payments, and refunds; materials and accessories issue and writing off in accordance with production objectives, and finished commodities receipt at the warehouse.

Under the project, volume and calendar scheduling of material requirement is performed; and user may freely access complete information on their actual movement.

**Project finance.** Software enables development of the financial plan under the project. The system programs hierarchical structure of the project income and expenses items, in accordance with which the planned indicators are specified with

regard to three scenarios (optimistic, pessimistic, and base). Software helps design planned Cash Flow of the project with a breakdown into operational, investment, and financial activity in accordance with the International Financial Reporting Standards. Actual cash flow under the project may be entered manually or automatically from the respective economic operations. The program employs the direct method (proceeds – payments) for development of Cash Flow that permits to model financial transactions under the project (by months and weeks). Following the results of Cash Flow development, the program calculates indicators of the project efficiency: net profit, return on investments (ROI), period of the operational self-sustainability, investments pay-back period, etc.

**Prime cost of works.** Software capabilities enable, with a breakdown into works, to reserve materials, write off them from warehouse, accept the manufactures materials (half-finished

products) in the warehouse, or use them for accomplishment of other works. Software permits to calculate both standard and actual prime cost of works.

**Compensation payment for works.** Work card automatically receives payments of compensation to the persons and results of work performance monitoring by means of workflow-system.

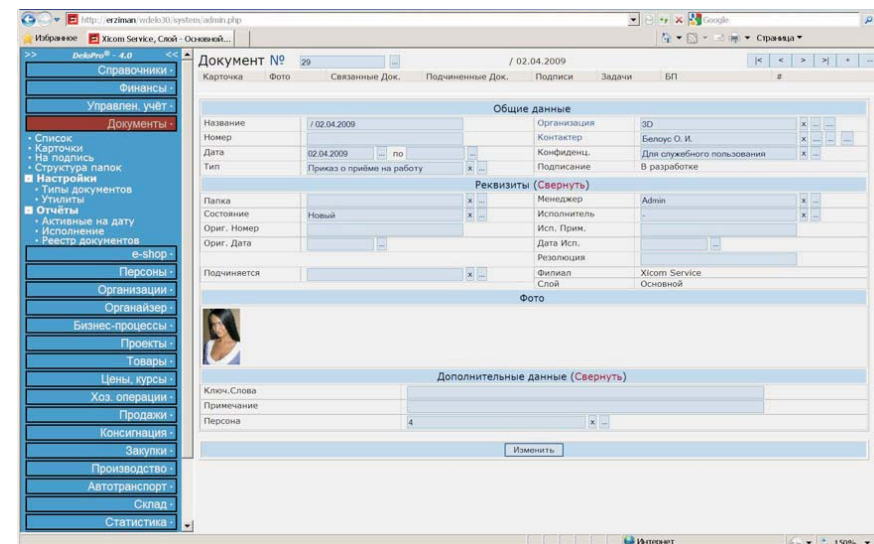
**Operational activity analysis.** The System makes available the conducted design works analysis using various reports: project registers, phases, and works, workload of the resources, schedule and status of payments as well as analytical report capabilities for the projects that are associated with software modules.

## Document management

The System provides for recording and storing of the documents in the user-defined formats in database. Document is an independent object. In order to facilitate convenience of search and work with documents, they may be presented in a tree of documents types, on the one hand, and in a tree of folders, on the other hand. Documents may be stored in the user-defined format both in database and in the separate catalogue on the server.

**The document card** contains its requisites: creation date, its type, confidentiality level, set of keywords, responsible persons, check dates, resolution, its image in jpeg-format (for fast viewing), etc. Each document type may be numbered by the separate enumerator.

**Associated and subordinated documents.** The system encourages establishment of alignment of documents among themselves and their subordination as well as performance deadlines and responsible persons.



**Signing and execution control.** Documents may have any number of signers. Software contains the mechanism for management of the documents editing and signing process. The program enables establishment of the signers' sequence as well as granting the right to sign on behalf of everybody. Upon the document signing, prohibition for its modification automatically comes into force.

**Storage of the documents images.** Whenever necessary, users may store in the database all the images of all documents formed in the operational logistics cycle – economic contracts, invoices, consignment notes, certificates, incoming and outgoing correspondence etc.

**Search through requisites and keywords.** Special reports encourage formation of the documents registers (including with selection by keywords) to supervise their condition, execution, and so on and, so forth.

## Job order production management

### Production

The System capabilities envisage automation of assembly-to-order production. Production deals with the commodities presented as assemblage (it may include other commodities, services, and resources). Special configurators facilitate creation of the assemblage production ranges. Business processes to be automated are as follows: assemblage (computers, furniture, etc.), mixing, packing, dismantling (sawing up, etc.), service (warranty and post-warranty service and repair of the commodities). System supports control over the assemblage serial numbers and component parts.

**Production objective (PO).** PO card stores information for the production process management: general data (type, priority, complexity, references to order on the commodities sale, project, etc.), timeline and quantities, condition (performance phase), specification of component parts, works, and resources as well as the associated BTs (issue of the component parts to the production and finished commodities acceptance at the warehouse, waste utilization). PO specification position provides access to information about warehouse transactions, component parts, reserve of orders, orders for warehouse release, availability of the component parts in warehouses and in work in progress, in requisitions and purchases. PO card keeps the history of contacts (assignments), drawings, photos, etc.

**Production process.** Component parts are reserved in the warehouses for particular POs. Then they are issued from warehouse to the work in progress. The actual prime cost is formed before finished commodities acceptance at the warehouse by way of complementing PO specification with additionally consumed resources, works, and services. The finished commodities are recorder at the warehouse. After that component parts and materials are being written off from work in progress in accordance with PO specification. The program generates necessary documents in the course of all process stages: orders on issue of component parts from a warehouse,

resource limit cards, specifications on assembling, orders, acts of the finished articles acceptance, etc.

**Service management.** The primary object is the task (receipt) for repair of the products, which is a variation of the production objective. It contains the served commodity and work, which it requires (represented as assemblage with the specification of component parts, materials, and services). Specification of the assignment for repair is formed on this basis. Repair

assignment records the serial number, warranty data as well as other information: completeness of a product, inspector remarks, technical conclusion, and the client's claim. Assignment for repair serves for generation of all the documents, including invoice for the product acceptance for repair, and the order forms, within which structure calculations are performed (for post-warranty service). Assignment for repair features a number of statuses: accepted, issued, executed, and delivered.

The screenshot shows a web-based application interface for production management. The main window displays a task card for 'Апельсиновый сок' (Orange Juice) with task ID 141. The interface is divided into several sections:

- Общие данные (Свернуть):** General information including task ID (141), operation type (Сборка), priority (Обычный), complexity (0%), and warranty status (Нет).
- Сроки и количества (Свернуть):** Dates and quantities, showing start date (23.09.2008), end date (23.09.2008), and quantity (1).
- Состояние (Подробнее):** Status section showing 'Заявка отправлена' (Request sent) and 'Закрыт' (Closed).
- Себестоимость плановая (Подробнее):** Planned cost table showing a total of 291,6669.
- Себестоимость фактическая (Подробнее):** Actual cost table showing a total of 0.

The left sidebar contains a navigation menu with categories like 'Закупки', 'Производство', 'Товары', 'Сервис', 'Инструменты', 'Рабочие центры', 'Прогноз', 'Списание брака', 'Выдача компл.', 'Возврат компл.', 'Настройки', 'Планирование', and 'Отчеты'. The bottom of the interface has buttons for 'Изменить' (Change) and 'Статистика' (Statistics).

# Strategic management tools

Modern concepts of the enterprise strategic management assume utilization of not only traditional financial indicators (reflecting historically accomplished facts and tangible assets of the company) but also non-financial (considering change of intangible assets condition and the environment): shares on the market, degree of the clients satisfaction, evaluation of the production quality, timeline for the orders performance, competence of the personnel, and other key indicators of the

primary business processes. Depending on the size of business and requirements of the shareholders for the management tools, the company may be managed on the basis of:

- analysis of the operational and economic activity;
- management accounting and budgeting;
- financial analysis;
- balanced scorecard.

In all cases, data for the subsequent analysis for the purpose of making the management decisions proceed to the BT log and cards of objects: bargains, production objectives, persons, counterparties, projects, etc.

## System analytical potential

Comprehensive analysis of the corporation economic activities shall be performed by means of reports on sales and purchases, production, warehouses, finance, and personnel. The program analyses documentary, financial, and commodity flows, accounts payable and receivable for the user-specified period of time for any type of activity with a breakdown into corporation members (including consolidated ones), divisions, employees, commodities, organizations, contracts, etc. up to the concrete bargain. Different kinds of registers, trial balances, etc. are used for the detailed analysis of the System objects condition.

**Statistical reports.** The System assess dynamics of change of the purchases and sales volumes and structure and dynamics of payments by means of multi-dimensional reports with breakdown into the user-defined discrete intervals (year, quarter, month, or any number of days). Commodity turnover reports facilitate assessment of the dynamics of commodity flows.

**Profitability analysis.** Recording of direct cost in the cycle of operational logistics (additional expenses in bargains on sale and purchase of the commodities, prime cost accounting in the production objectives, as well as accounting of the direct transportation and warehouse expenses) provides most important information for adoption of the management decisions. Reports on profitability and structure of expenses

with a breakdown into commodities provide data management accounting and personnel motivation system.

**Calendar of payments.** The forecast of proceeds and expenses of the monetary funds on the basis of the payments deadlines established in the bargains on commodities sale and purchase may be calculated with regard to the periods specified by the user, corporation member, counterparty characteristics, and bargain characteristics.

**Warehouse stocks.** Turnover balance sheets and reports on the warehouse stocks and unsalable commodity stocks data serve for assessment of the warehouse stocks condition.

**Control of deviations.** Special reports allow of supervising "non-price-list" sales in order to analyze the provided discounts and deviation of the prices from price list as well as commodity misdescription in the bargains.

**Transactions integrity control.** The System utilizes large group of reports for controlling integrity of closing of various documentary, operational, and warehouse transactions. For example, commodities Shipped but not written off, or Written off but non issued from the warehouse, Not completely allocated additional expenses with respect to purchases, etc. The System employs special report for the comprehensive check of all the transactions completeness.

**Universal reports** intend for formation of the objects sampling in accordance with the logic provisions for selection programmed by the user, sorting and list of fields (objects and their properties), which information proceed to the report.

**Personal tree of reports.** personal access rights may be established for all reports. The user may create derivative personal reports still keeping filters settings for programming parameters of the reports formation as well as for data grouping and sorting management.

**Active reports** allow of performing certain logistical operations with the objects sampling: to create orders or purchases, write off the commodities, which were shipped before, etc. with the subsequent automatic restart for actualization of information taking into account the carried out actions.

**Additional opportunities.** Hyperlinks facilitate data itemization in the reports to any depth; they also make available the horizontal grouping in order to display aggregated information (up to 3 levels). All reports may be exported into Excel for the further processing and graphic visualization.

## Budgets execution control by the cash basis method

The System provides for organization of the budgeting process with use of the business accounting and management accounts scheme as well as on the basis of income and expenses items. In the latter case, the budget is actually executed in accordance with the cash basis method. At the moment of BT

implementation, which is associated with the monetary funds flow, it aligns with the respective category of income and expenses and its amount allocates among the selected resources or financial responsibility centers (FRC). The System permits to view budgets by the categories or resources with a

breakdown into months and years. Planned indicators may be formed with regard to previous periods or entered manually; each figure may be itemized with a breakdown into BTs.

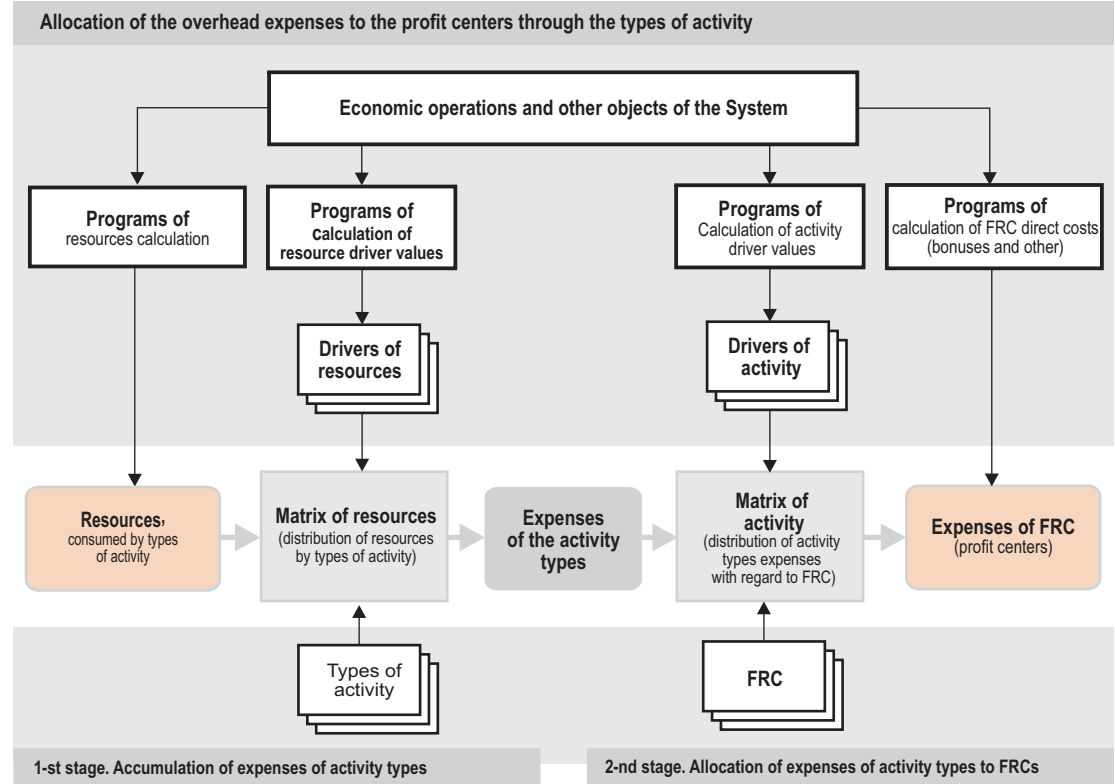
**Management accounting by the types of activity**

Marginal income of the profit-centers shall be calculated for the selected analytical period with use of the mechanism called "profitability by the commodities". In order to calculate overhead expenses, the program employs 2-stage method of redistribution of FRC expenses among the profit-center expenses by the activity types. The System calculates prime costs taking account of the operational logistics direct costs. Personnel bonuses calculated in accordance with the activity achieved results may be considered in the capacity of other direct costs.

**Marginal income of the profit-centers.** Program records all direct costs, which may be directly allocated to the prime cost of the commodities and services, in the operational logistics cycle. Marginal income with a breakdown into profit-centers (from the separate commodities to the corporation members) that is gained over the chosen analytical period shall be calculated with employment of the above mentioned mechanism called "profitability by the commodities".

**FRC activity types.** Each FRC may engage in one or several types of activity, which products may be consumed by others FRCs (both active and passive ones). Activity types consist of set of works or assignments directly associated with commercial activity of the enterprise, provision of the internal services or with the activity regulated by the government. All types of the internal activity consume various material resources.

**Allocation of expenses to the profit-centres.** In order to correctly distribute the consumed resources among the profit-centers, the program employs method of the expense accounting by activity types. This method consists of 2 stages. During 1st stage, the expenses are accumulated by types of activity and redistributed taking into account the mutual consumption. During 2nd stage, the expenses of types of activity are allocated to the profit-centers. The matrix of activity and profit-centers drivers of activity serve this purpose. As this takes place, expenses encountered during the first stage are redistributed among various profit-centers, which may be departments, branches, managers, individual commodities, groups of the commodities (brands), regions of sales,



counterparties, and projects.

**Accounting of the profit-centers direct costs.** The program provides for calculating the most significant direct costs, for example, employees' bonuses, and allocating them to the profit-centers in accordance with special programs. Here, we may account for these expenses while determining profit and profit-

centers profitability or neglect them.

**Efficiency of the managerial actions.** Software enables to records managerial actions and expenses associated with their performance. The special reports facilitate assessment of the accomplished actions impact on the financial indicators in the subsequent analytical periods.

## Budgeting and financial analysis

In order to manage holding structures, the System provides for usage of the classical budgeting tools established on the basis of economic operations posting to the account charts of the management accounting or, by means of a register method, to the income and expenses items. Budgeting implementation allows of creating integrated and effective control system that facilitates:

- planning of activity for the purpose of gaining the preset financial results;
- definition of the goals and their respective activity control indicators;
- allocation and distribution of the resources for achievement of the preset objects;
- optimization of financial flows with attraction of the external financing when need arises;
- employment of the plan/fact deviations analysis for activity correction by way of adopting necessary managerial decisions, etc.

**Capabilities of budgeting and financial analysis.** The budgeting work system principle implicates creation of planned operations of the company activity with the subsequent automatic calculation of the company planned and actual primary budget with a breakdown into various analytics. The system allows of:

- conducting operative controlling of the company activity in accordance with its financial structure;
- forming activity budgets with a breakdown into the budget items and their analytics as well as with a breakdown into the financial structure elements;
- creating managerial reporting in accordance with the international standards for the factual data and planned reporting generated with use of the planned operations data:
  - profit and loss report (P&L), consolidated and with a breakdown into the business units;
  - money resources flow report (Cash Flow Report), consolidated as well as with a breakdown into the business units (cash flow for the operational, investment, and financial activity);
  - balance (Balance Sheet), consolidated and with a breakdown into the business units.
- consolidation of the business units activity results and budgeting taking account of option to neglect the non-consolidated operations;
- distribution of overhead expenses among the business units; determination of the business units profitability;
- calculating the financial factors for analysis of various aspects of the company activity.

**Organization of the planning and budgeting process.** The System provides for creating 3 scenarios of the company planned activity (optimistic, pessimistic, and basic one). The sales plan may be created on the basis of the fact of sales for the previous periods with possibility to correct it during the planned period. Planned operations may be created for groups/categories/types of counterparties and commodities as well as for their concrete names. The plan of purchases is created on the basis of the Sales plan with possibility to correct it during the planned period. Budgets may be gradually approved by the responsible persons. The system ensures use of the "top-down" and "bottom upwards" budgeting techniques

**Planned operations** created in the System may be subdivided into the following types:

- Sales: operations associated with sale of the commodities;
- Purchases of the commodities: operations associated with purchase of the commodities for further sale;
- Purchases of assets to be posted to the balance together with investment activity and credits;

- Sales of assets to be withdrawn from the balance together with investment activity;
- Accrual/payment of expenses: operations associated with accrual of the expenses;
- Credit operations;
- Investments: aligning of operations with assets and budget of the investment activity;
- cross-cancellation of debts with the owners.

Program facilitates addition of other operations types depending on the company activity specifics or change of the existing types.

**Enterprise financial structure** is entered into the System with a breakdown into its elements (FRC, FAC, Cost Center, Profit Center). Each element is assigned with appropriate person responsible for data submission during the budget formation and operator of data entry.

**Budget system establishment.** The program permits to define



purposes, tasks, and principles of the budgeting system establishment, its composition and structure (FRC, forms, and regulations). Budgeting introduction progresses in two directions:

- development of the master budget, complex budgetary planning system of all the company activities depending on business processes;
- design of the structural divisions budgets and consolidated budgets, which structure depends on the financial structure.

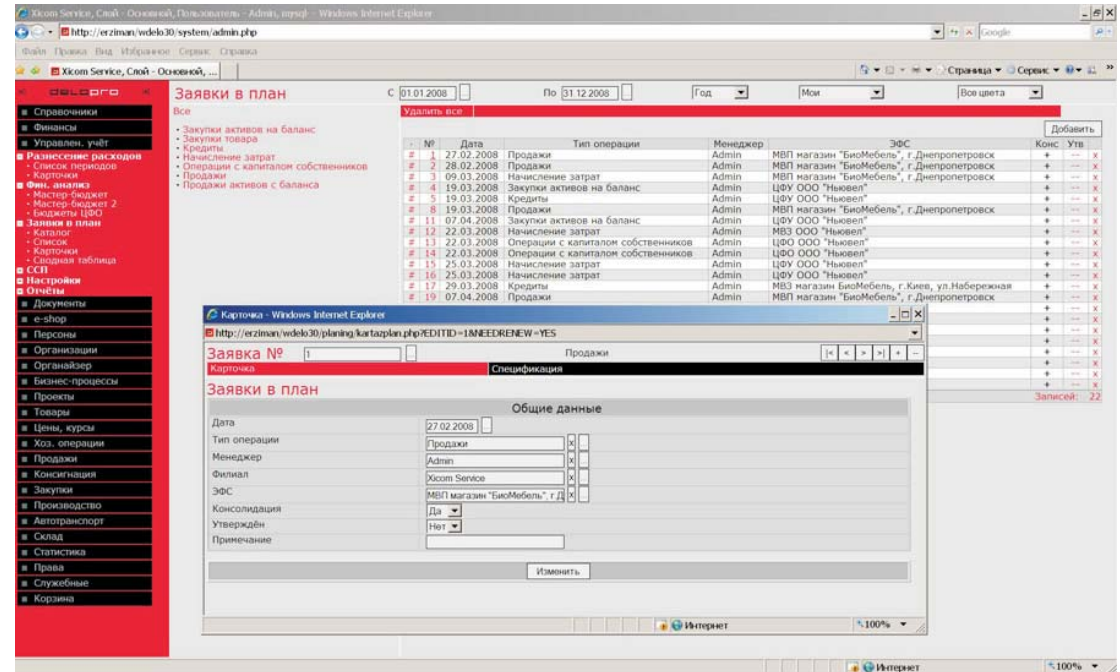
System defines the program for each budget item, which extracts necessary information from the BT log and other System objects. Each budget item may be itemized with regard to analytics (up to 5 levels) and have up to 2 levels of information grouping. The program analyses the plan, factual execution, and deviations by absolute value and in per cent for each article of the plan.

The System forms hierarchical structure of the master budget by articles with indication of the analytics levels.

The System facilitates determination of code, name, and analytics, with a breakdown into which the budget will be formed for each article.

Financial analysis grounds on use of the financial coefficients group calculated on the basis of the company balance and profit and losses report, which value helps assess the company value in the future; it also helps determine the company management efficiency on the basis of its value. Financial analysis fosters assessment of:

- company financial and property status;
- degree of the enterprise risk (capability of the obligations



- discharge towards the third parties);
- sufficiency of capital for current activity and the long-term investments;
- need in additional sources of financing;
- capability to increase the capital and reasonably use of additional resources;

- efficiency of the company activity.

Each financial coefficient encloses the program that extracts necessary data from the respective System objects.

## Balanced scorecard

Management in accordance of the balance scorecard (BSC) assumes decomposition of the company strategic objectives across all levels of management to the concrete employee. Enterprise business activity and indicators that characterize it may be conditionally divided into 4 groups:

- FINANCE (financial indicators necessary for achievement of the enterprise strategic objectives);
- PERSONNEL (management and motivation, training and career growth for successful implementation of the business processes);
- BUSINESS PROCESSES (perfection of internal processes for achievement of the preset financial indicators by minimization of costs, improvement of the commodities and

services quality, and satisfaction of the personnel needs);

- CLIENTS (perfection of mutual relations with the clients in order to achieve high degree of their satisfaction that enhance preset financial indicators).

BSC permits to determine interrelation of the objectives in the area of the finance, marketing, production, personnel and other types of activity as well as to provide for the continuous process of management correction with regard to the objectives. BSC facilitates monitoring of the process of changes in the company, which starts with training and development consistently influencing the business processes and work with clients and, finally, impacts financial indicators. Management in accordance

with BSC considerably reduces sluggishness of the management systems and facilitates prompt reaction to the negative factors across the whole added value creation chain and timely correction of not only the objectives but also strategy.

**The strategic card** formally describes the strategy in the form of set of strategic objectives and cause and effect relations between them. It permits to convey precisely individual objectives to each head and employee of the company and show how their implementation promotes realization of the company's general strategy. Cause and effect relationships visually present how intangible assets of the company will be transformed into financial results.

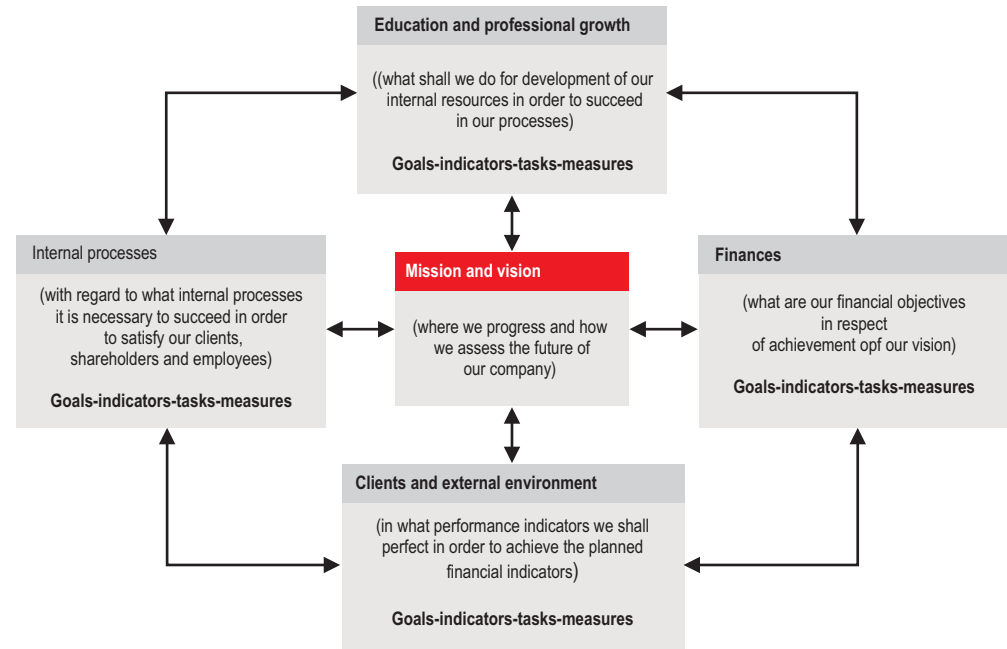
Definition of the key indicators allows of correlating the strategic objectives and motivation system. Strategy formalization fosters utilization of information technologies for monitoring of its implementation and forecasting of the strategic course revision consequences.

**Feedback (FB).** Continuous process control is necessary for the effective strategy implementation. FB's function is to monitor deviation of the company progress from the preset indicators. Use of FB with one loop is a usual management practice in many companies.

BSC implies presence of FB with a double loop, where not only a deviation from the selected course but also strategy itself undergone correction. Such planning organization allows of preventing the attempts to achieve useless or impracticable objectives. As this takes place, organization mission and vision remain relatively unchanged.

BSC provides FB to the management with minimum-possible time of delay (interval of time, which has elapsed from the moment of beginning of the system changes until the moment when the feedback system reacts to such changes). Application of the financial indicators permits to feel changes in the company even before they start affecting its financial condition.

**Budgeting and the Balanced Scorecard.** Strategic objectives and their respective system of indicators may be detalized for smaller time intervals (year, quarter). Operating budgets enclose the resources necessary for achievement of the preset indicators values.



## Access rights management and user actions monitoring

Users' access rights to the System objects and functions are programmed in accordance with their functional duties (roles)

associated with participation in business processes. The user interface correlates with his or her rights and shall be adjusted

individually.

### User rights programming

**The user.** He or she is the System object. The user card programs his name, bar code, e-mail address, password and login for entering the System, range of IP-addresses, which may be used for access, password period of validity, etc.

The user may create for himself one-time passwords for logging in the System from uncontrollable network (office of the customer, etc.). The card specifies the organization, which bargains will be accessible for the users of organizations-dealers.

**Formation of passwords.** The program provides for specifying requirements for password formation in the values by default: minimum length of symbols, password structure, period of validity in days, notification about the password validity period expiry, etc.

**Role matrix.** Users' access rights to the System functions shall be programmed in accordance with a set of performed operations in the company business processes by roles. Each

right in the matrix is assigned with the access range: Reading, Modification, Addition, and Deleting. *Role matrix* serves for establishment of consistency between the users and their functional roles.

**Rights matrix.** It is used for establishment of alignment between the roles and unique functional rights; the System contains approximately 400 of them. For the user's convenience, rights are presented in tree in accordance with the

functional groups corresponding to subsystems and modules of the System: purchases, orders, motor transport, etc.

**Critical sets of the rights.** The system allows of forming any sets of the rights, which the company believes to be critical in view of possible abuse on the part of users who possess them. These users are detected with help of the specialized report.

**Objects matrix.** Access rights to all significant objects of the System are personified as well. Those are warehouses, currencies, settlement accounts, types of the prices, bargains and economic transactions, corporation members (branches), categories of the commodities, price lists, directory sections, sections and types of the orders, confidentiality of the employees and documents, address directory, etc. The System provides for individual programming of rights to all reports, business processes, operations chains, as well as access rights to orders, purchases, economic operations, and production objectives of other users. *Objects matrix* serves for personification of the users' access rights of to the System objects.

**Confidentiality levels.** Access to the confidential information on the counterparties, contact persons, and documents may be personified by way of introducing the required number of confidentiality levels.

**Default value matrix.** More than 350 default values that are established individually for each user with the help of default values matrix serve programming of the System object parameters and logic of their functioning, interface, rights of users, etc.

The System provides export/import of the role matrixes, rights, objects, and default values into Excel for convenience of the access rights programming.

## User actions monitoring

**Events recording.** The System provides option for recording of certain list of events in database as well as for notifications of the users about their occurrence (by internal mail, e-mail, or SMS). The log records event date and time, number of the aligned object, operation type, IP-address, and name of the user.

The special report – *users activity* – allows of viewing all their actions recorded by the System for the selected period of time with a breakdown into users. Separate tab displays the history of significant objects changes.

**Recording of changes in the commodity sale orders.** In order to prevent possible wrongdoings, the System provides for recording of all the bargains price parameters changes (prices, exchange rates, quantity, discounts, and commodities units of measurement). This information is accessible in the order or in the changes log with regard to all orders. In addition, the System stores archive of all the documents, which were printed out, with indication of the user, date and printing time.

**Changes of the table fields.** The system allows of registering the selected fields change in the database cards of persons, organizations, commodities as well as categories and sections of the commodities.

Карточка заказа - Windows Internet Explorer  
 http://erzliman/web/30/zakazy/kartazakaz.php?EDITID=543

Заказ № 543 1 Инком

Карточка Спецификация Операции Печать Отгрузка Возврат Коррекция Свойства БП # ?

Корректировки | Документы | Резерв | Добавить | Конфигураторы | 1

**Изменения**

№	Арт.	Наименование товара	Кол.	Ед. изм.	Цена вал.	Вал	Скид	Курс	Цена грн.	Сумма грн.	Рез	Отл	Пр.
# 2624	CRX195e1wg	CD-RW 40x/12x/48x Sony IDE int.	5	шт	62,1000	\$	40	5,333	198,71	993,54	0	0	0 x
<b>Дата</b>		<b>Пользователь</b>	<b>IP</b>		<b>Содержание</b>								
07.02.2006 18:07		Admin	192.168.3.121		Цена 100 -> 245.05, Курс 5.6 -> 5.66098439681								
07.02.2006 18:07		Admin	192.168.3.121		Кол. 1 -> 3, Кол.факт 1 -> 3								
# 2623	RXH20CVNB	Наружный блок RXH20CVNB	5	шт	54,0000	\$	40	5,600	181,44	907,20	0	0	0 x
<b>Дата</b>		<b>Пользователь</b>	<b>IP</b>		<b>Содержание</b>								
07.02.2006 18:06		Admin	192.168.3.121		Кол. 5 -> 6, Кол.факт 5 -> 6								
07.02.2006 18:06		Admin	192.168.3.121		Кол. 6 -> 5, Кол.факт 6 -> 5								
08.02.2006 13:41		Admin	192.168.3.125		Цена 54 -> 52								
08.02.2006 13:41		Admin	192.168.3.125		Цена 52 -> 54								
08.02.2006 13:42		Admin	192.168.3.125		Цена 54 -> 52								
08.02.2006 13:42		Admin	192.168.3.125		Цена 52 -> 54								

Стр. 1 | Группировать | Расширенный | Записей: 2

Корр. = 0,00, Остат. = 33,60, Недоотл. 10

Итого, в вал. баланса 348,30 \$

Всего 1 583,95 грн.  
 НДС, 20 % 316,79 грн.  
 Итого 1 900,74 грн.

## Users' instructions formation

The system permits to adjust the role instructions for each user in accordance with its role in the company business processes.

**Instructions repository.** It is part of the delivery complete set. It represents a set of instruction files in HTML format containing description of the elementary business operations (BO) performance in the notation of the System interface. In order to administer the instructions display, System directory forms the tree of instructions (analogue of the table of contents) with its each branch aligns with the certain instructions file. Users may add their instructions into repository.

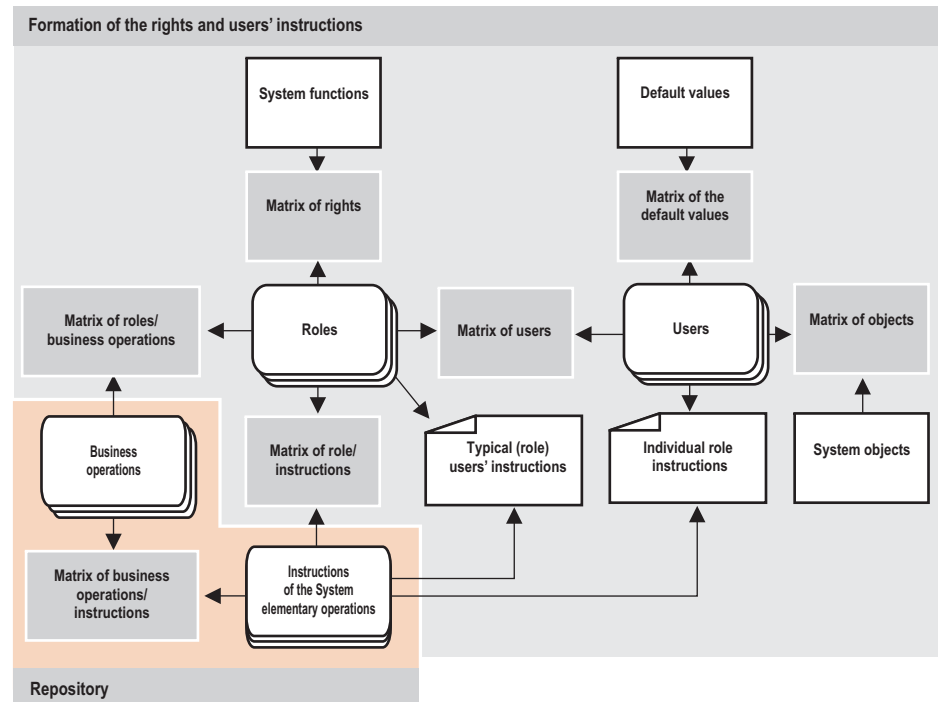
**Instructions of business operations.** The System presents typical BT basic set in the form of functional tree and is part of

the delivery complete set. The business-operation/ instruction matrix aligns instructions with BO. Users may add their own BOs that mirror the specifics of their activity and create the respective instructions.

**Role instructions.** The supermanager that possesses full access rights has access to the whole full instructions tree (analogue of the user's guide). All other users may only view those instructions that are necessary for performance of functional duties within the scope of their roles.

The role/business operation matrix is formed during development of the automation project. Role/instruction matrix is created from a business-operation/instruction matrix on the

basis of role/business operation matrix. Business operation/instruction matrix serves as basis for formation of the users' role instructions.



## Implementation and user's service

### Implementation project management

The success of the automation project depends on several basic factors:

- Appropriate presentation to the enterprise owners (or their representatives) of the automation goals and objectives, willingness to allocate necessary resources (including personal time), strong commitment to facilitate irreversibility of changes and accomplish the process with positive result.
- Possibility to form a full-sized implementation team with the insiders of the company to be automated. First of all it concerns the project head (manager).
- Establishment of confidential partner mutual relations

between the solution supplier and the company to be automated, mutual loyalty and search of compromises.

The original technique is employed for introduction of DeloPro 4.0 System (hereinafter referred to as the Systems), which is based on the classical approach to the projects management.

Works are implemented in two parallel flows:

- Development of the Automation project, and
- Program implementation in accordance with the automation project.

The automation project represents a set of the documents containing model of the accounting and methodology of the System use for automation of the Customer's business operations. Stages and major works, which shall be performed by the introduction team during the project implementation, are described more particularly below.

**Preparatory stage**

**Designing of the project Charter.** The Charter specifies the System implementation project goals and objectives (hereinafter referred to as the "Project"), list of the business processes to be automated, organizational structure and structure of the implementation team, and competences of the project participants. The charter contains principles and procedures of the project management – communication between the participants, the operating control and modification of the project, management of the risks and designing quality.

*The project goals and objectives* are key part of the Charter. They shall be formulated as particular as possible as they express expectations of the owner (the project sponsor). Ways of their achievement will be specified and detailed on each of stages of the project in the process of understanding growth with regard to the real business needs.

*Project scope.* Designers shall specify exhaustive list of the business processes to be automated with their short description and specification of scope. The company size in many respects determines the tools necessary for its management.

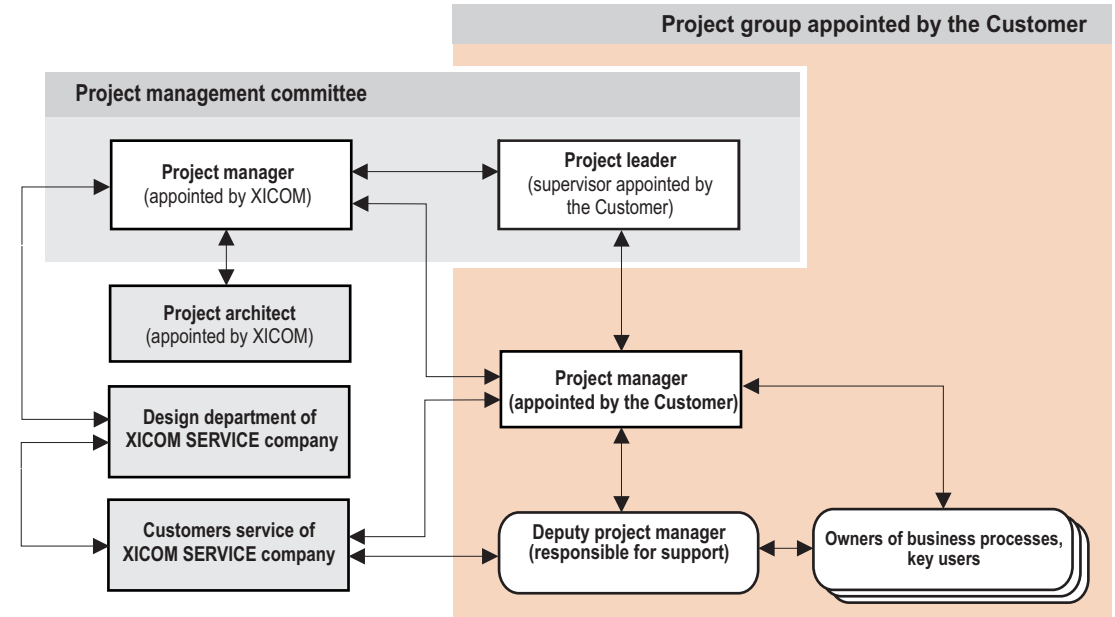
**Formation of the project team.** Implementation team composition depends on scale of the project, complexity of the business processes to be automated, and number of the System end users. In any case, management committee and design group shall be formed.

The management committee shall include the project Leader (manager appointed by the Customer: owner or its authorized representative) and the Project head (appointed by XICOM SERVICE company).

Project leader defines the goals and objectives, allocates necessary resources, accepts the performed works, and controls consistency of the achieved results with the preset goals.

Project head manages the design group through the Project Manager (appointed by the Customer); he or she is responsible for designing the automation project and ensures consistency of the results with the preset goals and objectives. The project architect is responsible for development of the *Automation project documents*.

Composition of the coordination group: project manager of Project head. Their primary function is operational management of the project and post-project interaction with XIKOM SERVICE company.



Project manager is the key figure, which in many respects determines success of the project. He or she has to meet a number of requirements:

- to be the consistent supporter of change introduction into the company;
- to be the authorized representative of the company owners and properly understand the business processes;
- to possess managerial abilities and authority in the company;
- to be entrusted with real power for management of the design group;
- to be able to participate in all working meetings within the scope of the project.

IT director or one of the company heads - commercial or financial director - may be appointed the manager of the project. Project manager is responsible for performance of all works by design group appointed by the Customer in accordance with the time schedule. During the stage of System's commercial operation, the project manager (or its assistant) facilitates

interaction with the support service of XICOM SERVICE company.

The project head provides methodological support to the Project manager for organization and accomplishment of all works, conducts the System programming, renders consulting services to the design group and personnel training, and provides for effective interaction with the project architect for development of the automation project. Design group appointed by the Customer includes Owners of the business processes, Key users of the System as well as assistant to the Project Manager.

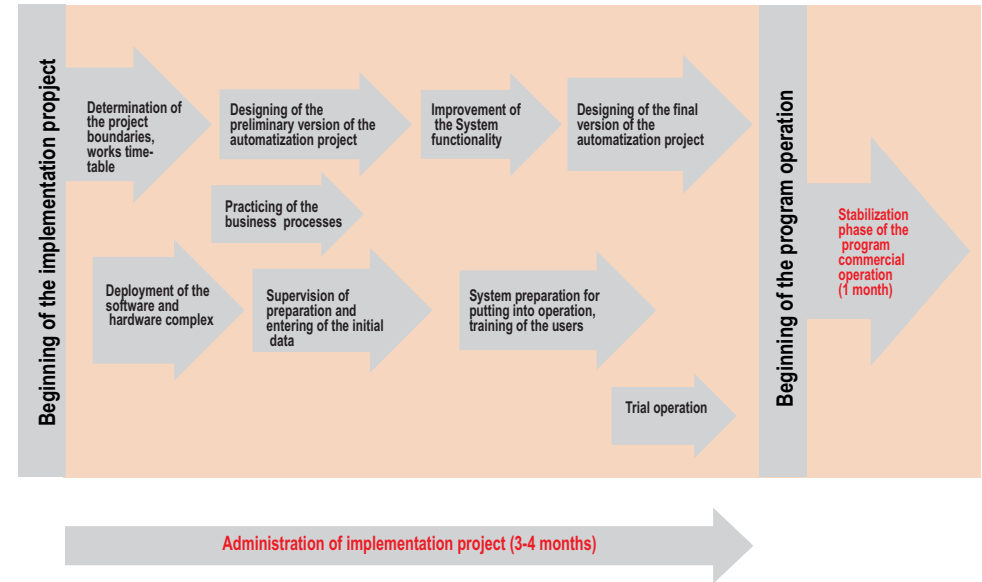
**Provision of the software and hardware complex.** XICOM SERVICE company shall create the container with a working database on its WEB-server and provide access to it for the Customer by means of Internet network for the period of the System implementation of. It allows of initiation of the immediate implementation works. Before the System putting in the commercial operation, the Customer shall make the decision about delivery condition: Licenses purchase for the right to use

the System with transfer of the initial texts or its rent.

**Work flows.** Works on the System implementation shall be performed in two parallel flows in accordance with works time schedule:

- designing of the Automation project (consulting phase), and
- System introduction in accordance with the Automation project (adjustment, preparation, and data entry, training of users).

Time plan-schedule of works contains the exhaustive list of works for each stage (phase) of the project, responsible persons for their accomplishment, planned dates of starting and finishing works, resulting effect, and the form of its representation. The separate document particularly regulates the essence of all works under the project, which makes it more controllable and predictable.



## Automation project development

Automation project shall be developed in 2 stages:

- Designing the preliminary version of the project,
- Designing of the final version of the project.

Upon completion of each stage, designing quality shall be checked for conformity to the project goals and objectives as well as to requirements and expectations of the Customer. Final changes may be introduced to the project at the end of System putting into commercial operation stage.

**Communications.** Meetings of the design group with participation of the project architect at the automation project development stage shall be held in the territory of XICOM SERVICE. The Project head holds meetings at the Customer's site with the members of implementation team appointed by the Customer and its key users for their acquaintance with the System, appropriate training, and practicing the business processes, etc. All other communications under the project shall be performed over the telephone or with use of e-mail. Remote access to the Customer's database makes such communications highly effective and enables the Project head to manage the work progress in a real time mode.

**Preliminary version of the automation project.** At this stage, the corporation model is developed, reengineering of business processes (BP) is accomplished, accounting model is designed, and role instructions are developed for the System users.

The corporation model includes corporation structure, operational business model, models of the commodities catalogue, pricing, expenses accounting, and formation of the marginal income.

*Organizational and structural planning.* At this stage, designers determine the structure and composition of the corporation members, service and administrative divisions, and their interaction in the business processes. They also clarify corporation members' access to the general accounting objects, warehouses, settlement accounts, and categories of the commodities.

*Administrative accounting task setting.* This work involves formation of FRC structure, tree of resources, and tree of the corporation income and expenses. It also determines mechanisms of the prime cost formation for sales and manufacture as well as marginal income with regard to FRC,

system of the activity key indicators and the list of basic reports.

*Designing of the pricing model.* This task implies audit of the existing system of pricing in the corporation and development of the optimum model of "as it will be" taking into account the System capabilities and mechanisms.

*Designing of the operational business model.* This stage contemplates designing the accounting schemes of the commodities and money flows that facilitate formation of balances with counterparties and between corporation members taking into account the business dealing features. Accounting schemes employ the program capabilities and mechanisms in the optimum way: active reports, transfer prices, branches, layers and general objects (warehouses, settlement accounts, categories of the commodities, requisitions for delivery, payment, delivery, reservation, kitting, etc.)

*Audit and reengineering of business processes (BP).* This task involves designing of the block diagrams of all BPs to be automated "as it will be" with a breakdown into business operations (BO), forming BP descriptions and an order of their performance taking into account the corporation operational

business model and the System features.

*Formation of role instructions (RI) for the System key users.* Role/business operation matrix shall be filled on the basis of the block diagrams of BP to be automated and a set of typical roles. Repository, which is part of the System complete set of delivery, contains the set of instructions in the notation of the System interface (HTML format) for performance of all elementary operations as well as business-operation/instruction matrix (for formation of instructions for each business operation consisting of sequence of elementary operations). While updating of the System functionality the Repository updates as well.

The role/instruction matrix is created on the basis of Repository and role/business operation matrixes. Further instructions are supplemented and corrected taking into account features of the project.

**Designing quality control - the first iteration.** It is facilitated by way of practicing the business processes with use of the test data (control example) employing the role instructions by the Key users and the Project manager with participation of the Adviser. Practicing goal is to evaluate completeness of the

realized model, its shortcomings, and the omissions admitted at designing, inconvenience while working with the System, etc. The results of business processes practicing foster formation:

- list of the automation project changes,
- list of the System functionality improvements.

**System functionality improvement.** XIKOM SERVICE company carries out improvement of the System functionality within the scope of the additional agreement to the base contract on delivery and introduction on the basis of the terms of reference on improvement.

**Final version of automation.** At this stage the designers introduce changes to the existing instructions (or enter instructions for the new elementary operations in Repository) taking into account the introduced improvements to the System functionality. All users are entered into the database and their roles in business processes are specified by means of the users' matrix.

*Matrixes of the rights, objects, and default values* are used for programming of the users rights to the System functions (by roles) and access to the objects and default values (individually

for each user).

*Instructions for the users.* They are formed with use of Repository and role/instruction matrixes.

*List of the basic reports.* Designers formulate the requirements to the basic reports in order to control the key business indicators.

*The list of regulations.* Final version implies formation of the list of the critical BO completeness checks that are necessary for ensuring control of the automated BP completeness and integrity with indication of method and periodicity of their performance.

**Designing quality control - the second iteration.** Finished BP pass a testing cycle on a control example with use of the users' instructions. Testing results are used for completion of the List of remarks and offers. When need arises, System functionality is to be improved. Acceptance of the automation project final version confirms its conformity with the preset goals and objectives.

## System implementation in accordance with automation project

These works begin at finishing phase of the Automation project preliminary version development. Their primary volume is carried out by the design group appointed by the Customer with assistance of the Project head who supervises this process using remote access to the Customer database. All works of this stage are personified and particularly regulated.

Preparation and entering of the initial data includes preparation of the card files for commodities, organizations, and persons. Works are conducted with use of epy templates in Excel format. System for the corporate accounting adjustment is being completed, pricing system adjusted, and data for the production accounting are entered.

Preparation of the System for commissioning includes programming of the users' rights, correction of the document templates, and adjustment of users' reports.

*Training of the personnel* for work with the System shall be conducted in several stages.

*Training of the Project manager, BP Owners and Key users.* It is conducted by the Adviser during designing of BP with use of typical role instructions. The project manager, during

performance of full cycle of the introduction works, shall acquire knowledge allowing him or her advising the System users and managing the changes.

*Training of the System users.* It shall be conducted by the Adviser (at the Customer's place) with participation of the Project manager and Key users on the basis of personal instructions. The users are advised of their role in the business process, System operating procedure, contents of the incoming and outgoing information, initial documents created in the course of work, alignment of the performed actions with other operations and processes.

*Command game.* The project manager and BP Owners together with the Key users practice all BPs with regard to several real tasks, correct the users' rights, and adjust the user reports, etc.

*Preparation and entering of historical data.* Project manager shall organize preparation of the historical data (commodities balance in the warehouses, money on the settlement accounts and in cash offices) with use of templates in Excel format. Before the System start, initial balance, accounts receivable and payable, pending bargains, initial numbers of documents and so forth are entered into the working database.

*System putting into commercial operation.* Project architect and the Adviser (at the Customer's place) supervise process of the System putting into commercial operation using remote access to the Customer database. They render assistance in resolving the non-standard situations that users face in the routine work focusing upon the search technique and errors elimination, system support procedures, typical operations performance rules, etc.

**Designing quality control - the third iteration.** Stabilization phase. Upon the Project manager initiative, final adjustment of the users' instructions shall be accomplished within a month of automated company operation upon the System putting into commercial operation. At this stage there are obvious potential omissions and "roughness" in BP functions, which were not detected at a design stage. Need may arise for the System improvement. Designing process is considered to be completed after introduction of all necessary changes into the users' instructions. Project leader shall determine conformity of the achieved results with the preset goals and objectives and accept the performed works.



# User's service

User's support assumes rendering of consultations, correction of errors, restoration of the damaged databases from backup copies, provision of the System new versions (updating) within the limits of purchased modules, information and methodical support. Consultations include answers to questions on the software basic functionality as well as to all other questions that directly concern its functioning within the limits of the developed automation project. Consultations may be rendered by phone, e-mail, or in the office of XIKOM SERVICE company.

**On-line support.** It shall be provided by the advisers and programmers participating in the implementation project. Advisers are capable to provide prompt and effective assistance, find the reason for the problem occurrence and its prompt resolution using temporarily granted remote access to the clients' database. Insignificant errors in software may be

corrected "at once" during consultation, and the file with modified program text is loaded on the Customer's server.

**Work with incidents.** WEB-site of the incidents registration serves for the efficient communications management while rendering assistance to users and ensuring registration of the clients' referrals and answers to them. Incident is a software or documentation error, incorrect implementation of the procedures, software functionality issues, wishes, proposals, and remarks of the clients. Card records all correspondence with regard to incident until its final resolution.

The site provides personified statistics on the incidents. Users may view answers of a support service to the incidents with private level of access as well as on all other incidents with the

general level of access. It permits to promptly and qualitatively support software users and reduce to a minimum probability of the misunderstanding and conflicts occurrence.

**Software functionality improvement.** In the course of software introduction and commercial operation it might be necessary to improve software. Such improvement shall be accomplished within the framework of the separate agreements. The most significant improvements enter the software basic functionality becoming accessible to all users and increasing consumer cost of the acquired assets.

# Supply and configuration options

## **TRADE Configuration (distribution and wholesale trade)**

Subsystems: REFERENCE BOOKS, CADRES (card file), ORGANIZATIONS, COMMODITIES, PRICES AND EXCHANGE RATES, ORGANIZER, SALES, CONSIGNMENT, PURCHASES, WAREHOUSE, ECONOMIC OPERATIONS, BUSINESS PROCESSES, FINANCE, RIGHTS, and SERVICE.

## **CADRES Configuration (human resources management)**

Subsystems: DIRECTORIES, CADRES (full size), ORGANIZATIONS, ORGANIZER, BUSINESS PROCESSES, RIGHTS, and SERVICES.

## **Additional subsystems and modules of the operating accounting**

CADRES (human resources management), MOTOR TRANSPORT, PROJECTS, PRODUCTION, DOCUMENTS, Buffers Management.

## **BI Modules**

BONUSES, OVERHEAD EXPENSES, FINANCIAL ANALYSIS, BALANCED SCORECARD.

# Subsystems and modules functional

## TRADE Configuration (distribution and wholesale trade)

Subsystems and the modules that are part of configuration:

**DIRECTORIES.** Creation of tree catalogues of the data various types. Adjustment and merge of the directory elements.

**PERSONS** (card file). Cards of persons. Personal records with adjustable sections. Management of the person status (contactor, candidate, or the employee). A photo and documents. Tasks (information about all contacts of the person). Activity of the person (economic operations, cards of the employee, personnel orders, performed functions). Reports on persons (birthday persons, register of persons). The universal report: formation of the persons lists in accordance with set criteria of selection.

**ORGANIZATIONS.** Organization cards. Organization status (corporation member, manufacturer, supplier, customer). Tree catalogues of the organizations (by the field of activity, type, region, groups). Economic contracts. Personnel of the organizations. History of contacts (tasks), chronology of bargains, balances with a breakdown into currencies, documents. Individual prices, discounts, and price lists. Conditions of delivery and Suppliers exchange rates. Prices of the commodities-competitors. Bargains quality indicators. Management of the marketing campaigns. Corporation formation. Profiles (individual settings) of the counterparties and corporation members. Matrix of the corporation members access to the accounting objects.

Reports. Register of the organizations, universal report, ratings of the Customers and Suppliers.

**COMMODITIES.** Nomenclature cards of the commodities. Commodity, service, work, resource, container. Requisites of the suppliers and manufacturers. Dimension and weight characteristics. Additional units of measurement. Standard parameters of sale, delivery, and storage. Key attributes and analytics. Planned and established prices, the standard cost price currency, and effective exchange rate. Stocks of the commodities, storage places by default. Specifications of the minimum stocks with a breakdown into warehouses. Description, schemes, photo, applicable certificates.

Assemblages, their parameters and methods. Specialized configurators of the production range (formation of the commodity-assemblages, its unique code and price). Selection. The materials register. Technological card and the assemblage scheme.

Simultaneous representation of the commodities nomenclature card file in the form of 3-tier qualifier (section-category-commodities) for pricing, in the form of a multilevel functional tree (for intuitive search), and in the form of a multilevel tree of the commodities groups (for segmentation and cauterization).

History of sales, purchases, and manufacture of the commodities with a breakdown into bargains. Stocks with a breakdown into warehouses. Delivery conditions. Individual prices for the organizations. History of the prices. Promotional events. Responses of the buyers. Compatibility (what replaces, what matches, matches what commodity).

Commodities categories. Consumer characteristics and the pricing base (currency, exchange rate, margins, formulas for the prices calculation). Registration of the commodity consignments additional properties (colour, size, style, manufacturer, country of origin, etc.). Users and the corporation members having access to certain category of the commodities. Personal discounts for the organizations and categories of dealers.

Universal report on the commodities. Commodities activity.

**ORGANIZER.** Corporate portal. News and announcements. The bargains that require processing (delayed reserves, payments, incomplete warehouse transactions etc.). Delayed and current tasks. Incoming messages of the internal mail. Actual execution of the budget items (for the responsible users). Forums and voting boards.

Management of working time and the employees' workload. Tasks (own, under control, assigned to me, assigned by me). Calendar of tasks. Daily routine. Control over the tasks performance and condition.

Internal mail. Incoming, outgoing, sent, and read messages.

Aligning of the messages with the intersystem events. Notifications and reminders.

Management of the contacts with the organization personnel and with contact persons of counterparties. Events (content and the parameters, participants, organizations, documents).

Negotiations, their content and parameters. A tree of negotiations. Tasks and contacts within the framework of the negotiations. The conclusion of bargains

Service management. Incidents. Contents, routing, resolution, comments, documents, and files. The incidents catalogue.

Knowledge base. Personnel testing. Personal notebook. Notes. Files.

**BUSINESS PROCESSES.** The graphic editor of business processes with use of the Petri nets. Import of the business processes from the file in PNML format. Processes catalogue and cards. Programming of conditions library of arches, comments, and transitions' tasks. Processes sequence. Operations sequence.

**FINANCE.** The multicurrency account. Flow of money resources with regard to the settlement accounts and cash offices. Import of the bank statements from the electronic banking system. Requisitions for payment. Formation of the cash flow budget. Schedule of payments.

Advance reports. Specification of the expenses. Allocation of the amounts to purchases (by the commodities) and trip tickets. Alignment with the operations of disbursement of the advance amounts. Balances with the materially responsible persons (MRP)

Bills discounting. Allocation of the amounts to purchases (by the commodities). Closing of the exchange rate differences with regard to the settlement accounts.

Credits accounting. Programming of the repayment methods. Schedules of disbursement and repayment of the credit,

payment of interest on the credit. Pledge. Credit operations. Control of the credit intended use. allocation of the interest for using credits to the prime cost of the commodities.

Tax events. Tax invoices and correcting calculations. Cargo customs declarations (CCDs). The register of the received and issued of the tax invoices.

Permanent assets accounting. Commissioning. Depreciation. Repair and modernization. Liquidation.

Allocation of the economic operations to any number of the account charts. Support of various accounting models and management accounting in accordance with NSBA or GAAP techniques.

Budgeting and financial planning with regard to the accounts of business accounting or management accounting as well as by the categories of income (expenses) and resources. Requisitions for the budget. Budgets execution management.

Price or quantity corrections.

Cross-cancellation of debts among the counterparties, which record mutual indebtedness.

Chains of operations. Formation of the aligned accounting objects group: bargains, BT, warehouse transactions, and documents in various corporation members by the special templates.

Monitoring of the key performance indicators.

Wide spectrum of the analytical and financial multiple-parameter reports on the cash flow with a breakdown into accounts, bargains, MRPs, etc. (registers, turnover balance sheets). Dynamics of the monetary funds flows (in accordance with the periods).

**PRICES, EXCHANGE RATES.** Unlimited number of the commodity prices. The standard prime cost and four basic prices in the currency of commodities category. Other prices of the commodities: in the derivative price lists (in any currency) calculated in accordance with the user's algorithms. Price list matrix. Formation of the commodities prices from the standard prime cost or from the Suppliers' prices. Exchange rates matrix. History of exchange rates and the suppliers' exchange rates. Group operations with the prices.

Discounts for the organizations and types of dealers by the categories of commodities. Analysis of the competitors' prices.

**SALES.** Management of orders (bargains on the sale of commodities or services). Advance payments. Commodity credits. Tenders, offers. Long-term agreements.

Order card. Essential conditions and the order specification. Order history. On-line balance. The economic operations associated with the commodities and money flows. Contacts and tasks, documents. Misdescriptions. Schedules of payments and shipments. Accounts for the partial payments.

Additional expenses on sales. Allocation of the amounts to the commodities from specifications (by volume, weight, cost, or quantity).

Automatic formation of sale prices on the basis of profiles of the client, contract, and order. Individual range of price change for the sellers. Formation of the bargain specification from the catalogues, configurators of the production range, Excel files, various logistics objects. Monitoring of the minimum sales price.

Commodities additional units of measurement. Work with the commodities-complete sets. Formation of tasks for the production.

Access to information about available stock with a breakdown into warehouses and the commodity consignments while forming of the order specification. Reservation of the commodities in warehouses, "on the road" (under the guaranteed purchases), and in work in progress.

Delivery "to the order". Requisitions for delivery. Inquiries to suppliers. Formation of sales prices from delivery conditions. Deficiency calculation. Requisitions for purchase and delivery of the commodities.

Formation of warehouse bargains. Writing off and delivery of the commodities. Use of various algorithms of automatic selection within the warehouse inventory cards (FIFO, LIFO, etc.). Monitoring of the commodities actual movement across the warehouse boundaries.

Shipment of the commodities. Requisitions for kitting and selection of the commodities. Formation of shipping documents under the several orders. Shipment of the selected (in accordance with requisitions for selection) commodities. Group printing out of the shipping documents package.

Return of the commodities (from the buyers). Formation of the goods receipt documents.

Payment of orders. Allocation of money to the chosen commodities from order specifications. Refunds (to the buyers) in accordance with the orders.

Automatic formation of tax events. Completion of the tax documents (invoices and correction calculations).

Formation and payment of commission fees. Mutual settlement of accounts with the intermediaries.

Import of the electronic shop orders.

Shops. Forwarding. Schedule of the agent visiting. Trading reports.

Retail sales of the shops. Cash register.

Servicing of the trading networks and network clients. Requisitions of buyers. Electronic data interchange system (EDI).

Accounts receivable management. Analysis of the overdue indebtedness and debt. Conciliation certificates. Permanent and temporary credit limits of the counterparties. Shipment interdictions. Customer Ratings (ABC analysis).

Planning of sales in quantitative and cost expression with a breakdown into the selected analytical periods (week, month, year). Analysis of the plans implementation.

Statistical and analytical reports. Profitability and efficiency of sales. "Out-of-price" sales. Commodities turnover. Forecasts of the monetary funds receipt. Analysis of the sales structure (cubes). Registers of shipments, returns, accounts. Monitoring of the commodity and document flows correspondence. Control of the operations completeness. Universal report on sales.

**CONSIGNMENT.** Consignment orders. Transfer of the commodities for consignment. Return from consignment with capability of the bargain simultaneous formation on sale of the commodities and their shipment to the buyer. Registers of documents. Reports for verification of the transactions completeness.

**PURCHASES.** Management of purchases (bargains on purchase of the commodities or services). Import. CCD posting.

Exchange rate differences. interaction with the customs license warehouses.

Purchase card. Essential conditions and purchase specification. Purchase history. On-line balance. Economic operations associated with movement of the commodities and money. Contacts and tasks, documents. Schedules of the commodities payment and receipt. Control of the deliveries accomplishment.

Misdescriptions. Documentary and operational specifications, reclamation work. Defects recording.

Additional expenses on purchases. Allocation of the amounts to commodities from specifications (by volume, weight, cost, or quantity). Allocation of the amount of the services purchase to other purchases, orders, movements, and trip tickets. "Retroactive" allocation of additional expenses to the prime cost of the commodities.

Formation of procurement prices from the delivery conditions. Formation of the standard prime cost and sales prices of the commodities from purchase. Forecasting of the commodities arrivals on virtual warehouse inventory cards (for "on the road" reservation).

Warehouse transactions. Allocation and receipt of the commodities with indication of the storage address. Registration of the commodities-complete sets specificity. Monitoring of the commodities actual movement across the warehouse boundary.

Receipt of the commodities. Requisitions for delivery. Requisitions for receipt. Register of the powers of attorney. Formation of the goods receipt documents for several purchases. Printing out of the labels with bar-codes. Return of the commodities (by the suppliers). Formation of the material issue documents.

Payment of purchases. Requisitions for payment. Allocation of money to the selected commodities from purchase specifications. Payment of purchases via MRPs. Money refunding on purchases (from the suppliers).

Monitoring of accounts receivable (debt) in accordance with the periods. Conciliation certificates. Suppliers ratings.

Deficiency calculation for warehouse, manufacture, orders, requisitions for kitting, average daily sales. Work with current deficiency. Requisitions to the suppliers. Inquiries to the suppliers.

Planning of purchases in quantitative and cost expression with a breakdown into the selected analytical periods (week, month, year).

Statistical and analytical reports. Profitability of purchases. Forecasts of the money expenses by the periods. Analysis of the standard and actual cost price, profitability of the commodities with regard to purchases. Analysis of purchases structure (cubes). Registers of receipts, returns, invoices, additional expenses. Commodities in requisitions and in the forecast. Monitoring of the commodity and document flows correspondence. Control of the operations completeness. Universal report on purchases.

**WAREHOUSE.** The warehouse inventory at the unlimited number of warehouses and special zones in warehouses: boxes, racks, shelves, and storage cells (with a unique identification code). Sharing of warehouses by different corporation members. Monitoring of documentary and actual movement of the commodities. Control of warehouse prime cost in accordance with the business accounting and administrative accounting.

Warehouse infrastructure management. Configuring, address storage.

Receipt, selection, and movement (kitting) of the commodities in warehouse and between warehouses.

Receipt and delivery of the commodities with use of the bar codes scanner and taking into account any units of storage: pieces, boxes, palletes, etc. Control of the minimum delivery (shipment) standard for each commodities consignment. Warehouse remark about actually accepted (issued) quantity with description of the commodities shortage reason in the orders for warehouse release (receipt) of the commodities.

Lot accounting. Management of serial numbers. Merchandising characteristics of the commodities consignment (colour, size, completeness, etc.), manufacturing and certification dates, useful lives, references to the documents and so on and so forth.

Work with the commodities-complete sets: dekitting upon receipt at warehouse and kitting upon delivery with indication of storage places for the commodities component parts. Individual commodities logistical parameters with a breakdown into warehouses: minimum and maximum stock, level of the excessive order and the storage address by default.

Revaluation. Rejection. Writing off of the shortage and posting of the surpluses.

Analytical reports. Control of the commodity stock with a breakdown into warehouses, definition of their stock available for sale. Monitoring of the commodities old stock in accordance with their useful life, certification, etc. Commodity turnover register by warehouses, consignment, and work in progress. Monitoring of the warehouse transaction completeness. Registers of the proceeds, expenses, movement, requisitions for selection.

**ECONOMIC OPERATIONS.** Tree of economic operations. Specification of recalculation programs. Registers of operations. Debts with a breakdown into currencies. Universal report on the economic operations.

**STATISTICS.** Individual (derivative) users' reports. Programming of the users' rights for changing of derivative reports parameters. Specialized reports for verification of the data integrity.

**RIGHTS.** Users. User's Groups. Matrix of the users' belonging to the groups. Matrix of the rights to the program functions for users' groups (roles). matrix of the users' individual rights to the program objects. Matrix of the individual default values for users.

Registration of events. Recording and notification programming.

**SERVICE.** Operations with databases (reserve copying, creation, deletion, and updating of tables). Passwords. Export-import of tables in XML format. System functions (SQL monitor and the report). Export-import in Excel format and into the accounting programs.

Photo manager. Management of site content. The styles editor. Documents editor. Books.

# Subsystems and modules of operating accounting

**MOTOR TRANSPORT.** Trucks and trailers. Maintenance service and repair. Depreciation. Two types of fuel. Refueling and fuel reserve, fuel writing off. Operation history. Trip tickets. Calculation of the routes prime cost. Allocation of transportation expenses to the commodities from specifications of orders, purchases, and warehouse movement.

Delivery areas. Delivery locations. Registers of requisitions for delivery. Formation of routes and trip tickets.

Reports. Utilization of the trucks. Repair. Travelling expenses. Reports on delivery.

**MANUFACTURE.** Management of the assembly-to-order production. Production objectives. Essential conditions and specifications. Assemblage, dismantling, repair, and mixing. Economic operations (delivery of the component parts, receipt of the finished commodities, utilization of waste). Management of the component parts and assemblages serial numbers. Accounting of work in progress. Spoilage writing off. Drawings, documents, and photos. Contacts and tasks, documents.

Reservation of component parts in warehouses and "on the road". Formation of requisitions for delivery. Formation of the component parts deficiency in accordance with production objectives (volume planning). Management of the component parts and assemblages serial numbers. Accounting of work in progress. Spoilage writing off. Dismantling.

Calculation of the products prime cost (component parts, materials, resources, specifications of overhead expenses) and formation of sales prices (extra charge for complexity, margin).

Service. Management of warranty and post-warranty repairs. Receipts for the products acceptance. Control of warranty coupons and serial numbers. Labour cost accounting.

Analytical reports. Guarantee repairs. Reserved commodities. work in progress. Plan-fact analysis of the labour costs. Registers of the tasks, products accepted in warehouse, component parts issued into production. Control of the technological and warehouse transactions integrity. Universal report on production.

**PROJECTS.** Management of project integration. Retention of

documents associated with the project (Charter, plans, and so on). Monitoring and management of project works (WorkFlow system). General management of the project changes (it is possible to keep a project status in archive and to re-plan the project at any stage).

Management of the project content. Creation of the phases and project works hierarchical structure.

Management of the project timeline. Determination of works structure. Definition of the works interrelations. Construction of network schedules and Gantt's diagrams. Management of the works performance schedule. Calculation of critical path, the earliest and latest dates for the beginning and the termination of works.

Management of the project cost. Project budget. Cost of works and resources. The prime cost of materials. Additional expenses under the project. "Retroactive" prime cost recalculation.

Project resource management. Planning of the human resources. Workload diagrams. Selection based on the professional skills. Calculation of payment in accordance with tariffs for each work and alignment with the salary payment operations. Planning of the working centers (equipment). Workload diagrams.

Management of the project deliveries. Calculation of the materials requirement. Creation of purchases. Issuing of materials associated with the project. Posting of the finished commodities. Redirection of materials and half-finished products from one project to another.

Management of the project communications. Management of the project participants. Information dissemination. Reporting of accomplishments. Differentiation of the rights among the project participants.

**Buffers management.** Distribution company stock keeping on the basis of the theory of constraints. Management of the dynamic buffer for each delivery chain link individually for each commodities. Creation of the tasks for warehouses replenishment. Alignment with transport logistics. Import of the dealers' warehouses and retail network conditions with opportunity of their inclusion in the chain of deliveries and stock

keeping.

**DOCUMENTS.** Management of the corporation document circulation. Creation of the documents' tree. Associated and subordinated documents. Signing and execution control. Storage of the documents images. Search by the requisites and keywords. Routing of documents.

**CADRES** (human resources management). Organizational and structural planning. Administrative chain of command. Organizational and functional diagrams of the corporation and structural divisions. Positions and their properties. Organigrams.

Personnel recording and office-work. Employees' cards. Personal and group personnel orders, enterprise orders. Sets of formulations for the various types of orders. Monitoring of the orders expiry time. Registration of the personnel promotion, keeping the career history. Calculation of any types of experiences.

Planning and calculation of annual basic and additional vacations. The sheet. Sick-lists, absences, overtime, etc.

Control of the personnel promotion and motivation. Selection, training, and personnel development. Official duties, certification, testing, and improvement of the professional skill. Recording of the training events, employees' participation and registration of the training results. Personnel certification.

Registration of the resumes and vacancies, WEB-site placing, filling of the electronic questionnaire with candidates. Selection of candidates and formation of the personnel reserve taking into account the position requirements.

Formation of analytical and statistical reports, lists, and statements with regard to the orders, personal file sections, selection of candidates, and structure. Monitoring of the critical parameters. Tips and reminders.

Reports with regard to the employees, orders, and the staff list.

**BONUSES.** Motivation of the personnel by the actual results of their activity. Programming of the bonuses calculation algorithm for each user. alignment with the administrative account. Accounting of the bonuses and their payments.

**OVERHEAD EXPENSES.** Budgeting, monitoring, accumulation, and allocation of the direct and overhead expenses to the of financial responsibility centers (FRC). Two-stage method of FRC expenses redistribution over the profit-center expenses through the types of internal activity (Activity Based Costing). Provision of operating information to the owner about profitability and efficiency of the business in general and with a breakdown into FRC for adoption of the management decisions (implementation of the management provisions). Recording of the management actions and evaluation of their impact on the financial indicators.

**FINANCIAL ANALYSIS.** "Top down" and "bottom up" budgeting. Master Budget. Budget of income and expenses. Cash flow

budget. Forecasted balance sheet. Operational and financial budgets. Reports with regard to the budget. Operating controlling of the holding activity with a breakdown into business units. Creation of the administrative reporting in accordance with international standards:

Profit and loss statement (P&L), consolidated and with a breakdown into the business units;

Report of the money funds flows (Cash Flow Report), consolidated and with a breakdown into business units (cash flow with regard to the operational, investment, and financial activity);

Balance (Balance Sheet), consolidated and with a breakdown into the business units.

Financial reporting, financial coefficients, calculation of financial indicators.

**BALANCED SCORECARD.** Transformation of the corporation mission and strategy into set of key indicators (strategic cards), which form the basis for strategic management system. Strategic topics. Strategic objectives (tasks and provisions). Key indicators target and actual values.

## Our clients

Some of our clients are presented below:



**"Robert Bosch Ltd" Company** (Kiev). Repair and warranty service of electric tools of BOSCH, SKIL, TREMEL trade marks. Wholesale trade in thermal technical equipment of BUDERUS and JUNKERS.



**"Phoenix-contact" Company** (Kiev). Authorised representative of PHOENIX CONTACT GROUP in the territory of Ukraine. Wholesale trade.



**"ONIKO" Company** (Kiev, [www.oniko.kiev.ua](http://www.oniko.kiev.ua)). Supply of materials, chemical agents, and equipment for radiological diagnostics. The official distributor of AGFA company.



**"OLDI Trading and construction house" Company** (Kiev, [www.oldi.kiev.ua](http://www.oldi.kiev.ua)). Import of the floor covering, wholesale trade in the construction materials, network of building supermarkets.



**"AKRILAT-GROUP" Company** (Kiev). Import-export of chemical raw materials, rendering of transport services with use of the special-purpose vehicles.



**"AVIS-METIZ" Company** (Kiev, [www.avis-metiz.com.ua](http://www.avis-metiz.com.ua)). The large seller of the construction and machine-building fixture in the market of Ukraine. A network of branches.



**Белтімпорт®**

**"Beltimport" Company** (Kiev, [www.beltimport.com.ua](http://www.beltimport.com.ua)). The leader in supply of high-quality driving system elements. The general distributor of "Optibel" firm of Germany.



**"IMRAD" Company** (Kiev, [www.imrad.com.ua](http://www.imrad.com.ua)). Wholesale and retail trade of the electronic components.



**"INTERATLETIKA Trading house" Company** (Kiev, [www.interatletika.com.ua](http://www.interatletika.com.ua)). One of the leaders in the wholesale market of the sport goods.



**"ON LINE" Company** (Kiev). The supplier of industrial and household systems of ventilation and air-conditioning of RHEEM (USA), ON LINE, Twitoplast Ltd (Israel), RHOSS, NOVAIR, F.B.R., VORTICE (Italy) trade marks. Designing, selection, and delivery of equipment, assembly and start-and-adjustment works, warranty, and service.



**"August-Ukraina" Company** (Kiev, [www.avgust.com.ua](http://www.avgust.com.ua)). Trade in pulp-and-paper production of the largest enterprises-manufacturers of Ukraine and Russia.



**"SAMEX" Company** (Kiev, [www.samex.com.ua](http://www.samex.com.ua)). Wholesale trade in office supplies. A wide spectrum of the writing implements for the offices, schools, souvenir writing implements. A network of shops.



**"AKVILIN-GRUP" Company** (Chishinau, Republic Moldova). Distribution and wholesale trade in a foodstuff, alcoholic beverages, and tobacco products. A network of mobile shops.



**"EST PLUS" Company** (TM «Unilight», Poltava). Distribution and wholesale trade in electric lighting products. A network of branches and regional representative offices.



**"CAMION OIL" Company** (Kiev, [www.camion.com.ua](http://www.camion.com.ua)). The general representative of the "LIQUI MOLY" companies in Ukraine. A network of branches and the trade representative offices.



**"DMT-CENTER" Company** (Kiev, [www.aandd.kiev.ua](http://www.aandd.kiev.ua)). The general distributor of A&D company (A and D) products in Ukraine: electronic tonometers, glucometers, and other medical equipment.



**"Winner Automotive" Company** (Kiev, [www.winnerauto.ua](http://www.winnerauto.ua)). Official dealer of Ford, Jaguar, Land Rover, Volvo, and Porsche brands.



**"Energostal" Company** (Kiev, [www.energostal.com.ua](http://www.energostal.com.ua)). Exclusive representative of «AWH» GmbH in Ukraine. Wholesale trade in corrosion-proof metal rolling. A network of branches.



**"Teksika" Company** (Kiev, [www.teksika.com](http://www.teksika.com)). Manufacture of clothes and distribution of textiles. Wholesale supply of fabrics to the Ukrainian light industry enterprises.



**"Euroizol" Company** (Kiev, [www.euroizol.com.ua](http://www.euroizol.com.ua)). One of the leaders in the construction materials market of Ukraine. A network of branches across the whole territory of Ukraine.

More particular detail on our other projects are presented on a site [www.delopro.com.ua](http://www.delopro.com.ua).



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