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ТОВ «НАФТОГАЗ ТЕК»

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Out. № П-0076-13 from 16.03.2013

For minister of oil industry

Gentlemen!

We introduce you «NAFTOGAZ TECH», LLC – the supplier of technical and technological decisions for automation of business processes. The company is located in Ukraine (Kyiv) and is a member of the «ND» Group of Companies («ND LTD», LLC, «ND DATECS», LLC, «NAFTOGAZ TECH», LLC, «ARGUS – SECURITY SYSTEMS», LLC). The «NAFTOGAZ TECH» Company is an authorized integrator of decisions of the enterprises of the «ND» Group of Companies (hereafter – the «ND» GC) under realization of complex automation projects.

The activity of the enterprises of the «ND» GC in the development and introduction of IT-decisions of automation of business processes on the filling stations, petroleum storage depots and gas storages began in the middle 90s. Today the proposed decisions are powerful means for the organization of qualitative and full-fledged commercial accounting of oil products and gas. The users of software and hardware complexes are networks of filling stations, oil and gas storages of national standard, as well as transnational oil companies: LUKOIL, TNK-BP, ROMPETROL, PETROM, SHELL, NAFTOGAZ OF UKRAINE, AVIAS, UKRNAFTA, GALNAFTOGAZ, and Ukrainian Railway.

Totally more than 4000 of filling stations, fuel storage units, petroleum storage depots, oil and gas storages at their daily work are connected with the use of the equipment and software of the production of enterprises of the «ND» GC in Ukraine, Russia, Moldova, Belarus and Kazakhstan. The «ND» GC possesses own production capacities. Ultrasonic measurement systems, system of information cryptoprotection and electronic digital signing (EDS) of documents, the software – have all permitting documents for the possibility of legal operation. The enterprises of the «ND» GC have a wide experience of certification and service maintenance of the proposed equipment and software abroad.

The list of the proposed to your company decisions is given in **Application 1** to this letter (or on Web site **www.nd.ua**). Among other products it is necessary to single out **Software and Hardware complexes of the "ND-OIL"**, "**ND-OFFICE" and "ND SELF-POS" in a set with ultrasonic level gages – as devices for organization of total cycle of accounting, storage and release of oil products in depots and retail chains of the filling stations. A brief description of complexes is given in Application 2** to this letter.

In case of your interest for having more details about us and our products, we propose to carry out a working meeting at acceptable time and comfortable place for you.

With respect, Sales Manager of the «ND» Group of Companies, Vladimir Rubanik (+380 67 508 55 95)

Application 1 to the letter Nº Π -0076-13 from 16.03.13

The list of proposed decisions for oil and gas storages

- 1. The software and hardware complex for the automation of petroleum storage depots, oil and gas storages of the «ND-OIL»;
- 2. Monitoring system of deficiencies and abuses based on the software of the «ND-OFFICE»;
- 3. Stationary ultrasonic level gage signaling devices UUS-01 for filling stations and petroleum storage depots, "ND-UUS" software for monitoring of fuel levels in tanks;
- 4. Organization system of kilogram accounting and factor analysis of «nonstandard» situations based on the software of the "ND-UUS";
- 5. Portable ultrasonic level gages UUP-01 for petroleum storage depots and railways;
- 6. Audio announcement systems, public address, combined packages;
- 7. Simple video observation and video registration systems;
- 8. Intelligent video observation and video registration systems DALLMEIER, «ARGUS-MD» with the possibility of integration with fiscal and nonfiscal control systems;
- 9. Fire alarm signaling system «ARGUS»;
- 10. Gas analyzers of «NAFTOGAZ TECH» (complex control system of gas loss and accumulation of dangerous steams);
- 11. Early detection and information of emergency situations system on potentially dangerous objects (for the Ministry of Emergency Situations) based on concentrators of CU-767 of «NAFTOGAZ TECH».

The list of proposed decisions for retail chains of petrol and gas sale

- 1. Specialized cash registers and control systems for filling stations;
- 2. On-Line transaction systems of «NGC»: loyalty, cashless payments;
- 3. Terminal equipment for the On-Line systems: POS-terminals, computer and desktop GPS-767;
- 4. Information integration system of the «ND-OFFICE» for automation of operative management fuel accounting in the filling station networks, petroleum storage depots and gas storages;
- 5. Automated system of remote data transfer (based on GSM, ethernet);
- 6. Monitoring system of deficiencies and abuses on the basis of the «ND-OFFICE» software;
- 7. Organization system of kilogram accounting and factor analysis of «nonstandard» situations in business processes;
- 8. Monitoring system of equipment efficiency and staff operation in the filling station networks; 11. Stationary ultrasonic level gage signaling devices UUS-01 for filling stations and petroleum storage depots;
- 9. Self-service systems «PSS-767», «PSS-797» (the "ND SELF-POS" automatic payment terminals for automatic and semi-automatic filling stations);
- 10. Remote order systems wireless terminal for cash register and hardware tools control systems management;
- 11. Audio announcement systems, public address, combined packages;
- 12. Terminals for fuel release by bank payment cards (adjustment under electronics compartment of the fuel-dispensing unit);
- 13. Advertising processing for organization of advertising display on the filling station networks;
- 14. «ARGUS» wide-screen monitors in antivandal street performance;
- 15. Intelligent video observation and video registration systems DALLMEIER, «ARGUS-MD» with the possibility of integration with fiscal and nonfiscal control systems;
- 16. Fire alarm signaling system «ARGUS»;
- 17. Early detection and information of emergency situations system on potentially dangerous objects based on concentrators of CU-767 of «NAFTOGAZ TECH» production.

Application 2 to the letter № П-0076-13 from 16.03.13

Description of automation format of storages by means of "ND-OIL" and "ND-UUS"

The enterprises of the «ND» GC will help to optimize volume and level of automation of technological processes, and also in demands for automation means, following accumulated experience, regulatory and legal framework. The use of the "ND-OIL" software product with software module of on-line monitoring of the "ND-UUS" tanks will allow avoiding of problems of joining and adapting of already existing decisions into single software and hardware complex. Included in the "ND-OIL" scaling principle will allow growing the automation level with the demand growth, and the use of know-how in telecommunication will allow bringing up the automation level to the formation of single centralized marketing control system in the company.

The complex automation – this is not only a tribute to fashion, but an urgent need, allowing savings where it was earlier impossible due to objective causes: at intake, storage and shipment of oil products and gas. The automation decision involves **complex staged automation of technological processes**, safety and document workflow systems on petroleum storage depots and gas storages. The use of the decisions of the «ND» Group of Companies provides:

- 1. **control and management of** technological processes of intake, storage, shipment and cash-and-carry trade (package filling) including the use of cash equipment;
- 2. **quantitative accounting** of oil products and gas by the tank capacity, as well as with the help of flow measuring systems;
- 3. **safe use** of technological equipment and constructions, timely detection of emergency and creation conditions for their localization;
- 4. **fire safety** and environment protection.
 - Management and control system by technological processes of the petroleum storage depot can be carried out centrally from one point - operator's room or dispatch office with open or hidden control of all actions from Central office of the company.

The «ND» GC offers new approach to the complex automation of petroleum storage depots – staged development of the single software and hardware automation and safety complex from ready elements, remaining consumer's right to choose the equipment and work order performance.

The view on the development stages of the Complex based on decisions of the «ND» GC enterprises:

- 1. installation of commercial accounting system of oil products (gas) in tanks ultrasonic measuring systems, unique in Europe, which can be used in tanks with pontoons, floating, and also «momentless» tops, which are of current interest for old tank battery;
- **2. automation of loading zone**, providing a high loading accuracy into the fuel tanker trucks, shortening equipment downtime and staff employment at loading, eliminating the possibility of abuse and decreasing the amount of natural loss;
- **3. automation control system of cargo pumps** of petroleum storage depot (gas storage), providing the work of pumping unit in optimum performance with signaling about the working parameters and achievement of threshold parameters, set in demand of customer (user): all mentioned together will allow increasing operating time of aggregates and their safety exploitation;
- **4. automation of oil product inlet zone** with the purpose of decreasing of downtime of railway tanks, increasing of accounting accuracy and operational safety; a multistage inlet system can be created, consisting of oil product parameter control device at the inlet (before sealing off tank vessels portable ultrasonic non-contact level gage), railweight units for weighing of gross and tare weight, and also meters at oil products discharge;
- **5. development of electronic document workflow system** with integration possibility with other customer's accounting systems, essentially increasing accounting operational efficiency, work planning and business processes optimization;
- **6. video observation and safety system**, including access control systems with the possibility of development of the single monitoring centre local or remote;
- **7. system of early detection of emergency situations and announcement** of people in case of their occurrence in object, and it is possible the connection to the centralized monitoring panel and with the corresponding project and service maintenance.

The description of automation format of network objects by means of the "ND-OFFICE"

The ND-OFFICE software and hardware complex is a base decision for the beginning of complex automation. It is meant for the operation automation of the control structure (office) of the company, engaging in wholesale and retail trade of oil products (gas) and related goods.

The ND-OFFICE involves all sides of oil product sales management: from collection of shift reports from filling stations (in the form of transaction material) and till stock accounting of related goods and services, cashless payment operations, stock control of fuels and lubricants, purchase and calculations with counteragents inspection, analysis of financial operations. The ND-OFFICE maintains a volume-weight method of oil product accounting, tank and piece accounting, joined with cash systems, allows realizing fuel input to the filling stations with time fixation of the beginning and end of discharge into tanks.

The ND-OFFICE is simple in installation and exploitation, reports are formed in MS Excel format and other popular formats. The system is integrated with accounting and analytical programs, whereby increasing the output from the enterprise automation in general. For the organization of the exchange with accounting programs in the ND-OFFICE data base data presentation is formed by the agreement with user. Hereafter the user can carry out procedures as to the convenient integration of programs.

The ND-OFFICE in base configuration allows forming and printing of more than 30 various reports and protocols. Built-in module for the development of reports Fast Report allows user independently prepare report forms according to growing demands of the company. To the software complex the analytical module OLAP-cube is built-in. It serves for building of diagrams and tables, used for the solving of various analytical tasks of the company.

Complex automation by means of the "ND-OFFICE" allows reaching the following aims:

- organization of rigid vertically integrated accounting of release of fuel and related goods by cash and cashless payments;
- providing of the single technological cycle of fuel release on the filling station with minimizing of the influence of «human factor» (including errors and abuses);
- providing of automatic work of level gages and terminals together with cash register decreasing of costs for the maintenance of auditing department;
- automation of profitability control of enterprise by means of operative control of purchase and sale prices, regulation of the price formation process;
- automation control from central office of tank fullness and planning of fuel delivery to the filling station;
- organization of the preliminary announcement of emergency situations according to the demands of MES;
- automation control as to the fullness of warehouses (of filling station) by the related goods, including the introduction of the automated order and inventory system, unification of the list of goods and services for all network, logistics automation;
- providing control of operators and sellers actions with the help of «logging» of the events on the control system of the fuel-dispensing unit (automatic journaling of operator's actions, control of storage counters of the fuel-dispensing unit);
- entrance of the list of ALL transactions into office for their further use in building of charts and diagrams (business analytics).