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**Institute of Logistics and Warehousing
e-Economy Centre**

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e-Procurement System

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Poznań, December 2004

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INTRODUCTION

Procurement is the process of purchasing production components, raw materials and other goods necessary for operating of a company. It includes:

- Supplier selection,
- Placing an order for goods and services,
- Gaining acceptance of delivery department,
- Processing an order for purchase,
- Order realisation,
- Delivery,
- Receipt,
- Payment.

In case of e-Procurement, the process of purchasing is realised with the use of internet technologies. E-Procurement is the solution for more effective money management, accelerating money circulation in the economic cycle, improving precision and unanimity of flowing data and decreasing administration costs.

e-Procurement system enables to realise the process of purchase without paper documents. The proposed solutions are fully self-service internet systems that improve concluding agreements between suppliers and purchasers and make the critical data supporting purchase decisions available. The abilities of e-Procurement vary from simple on-line buying to the full participation in electronic commodity market.

e-Procurement system is therefore the way of organisation of delivery process on the basis of electronic data interchange. It is supported by system solutions of internet network that enables effective co-operation between buyer and seller.

The circulation of documents (order, order confirmation, advice note, invoice) is automatic and electronic. Employers of all company departments get the access to the uniform purchase service. e-Procurement system embraces the whole delivery process.

Fig.1 presents the scheme of dimensional computer network of e-Procurement system.

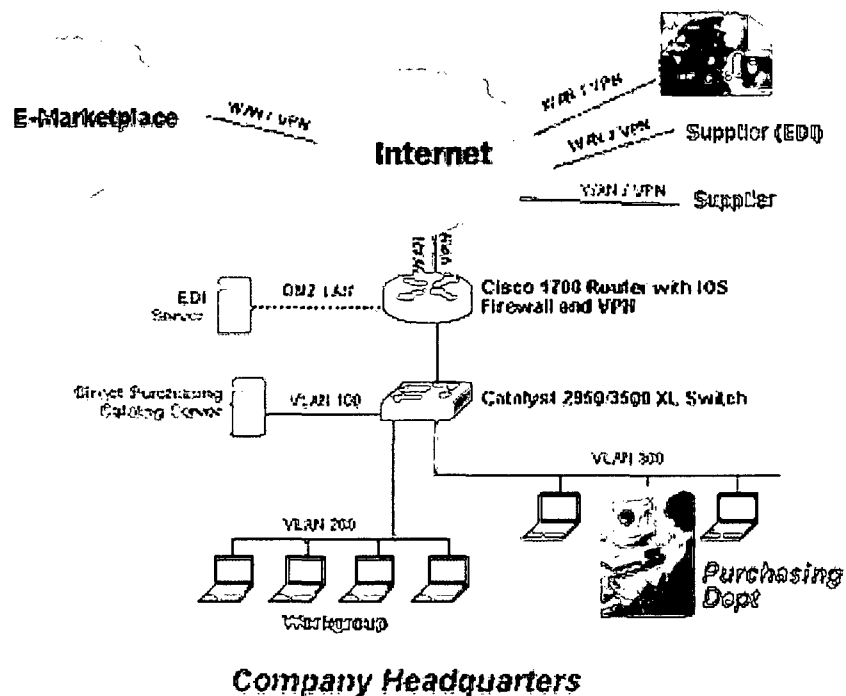


Fig.1. The scheme of dimensional computer network of the e-Procurement system.

e-Procurement system requires safe connections between partners. Fig.1 presents routers equipped with optional modules of VPN (Virtual Private Network) that offer ciphering with the use of algorithms DES and 3DES (3DES is the most effective available ciphering algorithm) with the speed of the interface (T1/E1). At the same time it secures flowing data. The network administrators may implement more advanced systems of protection of data, improve efficiency of the network and create virtual local networks (VLAN).

1. ORGANISATIONAL AND FUNCTIONAL PROJECT OF E-PROCUREMENT SYSTEM

e-Procurement system of interchanging data between companies of selected economic branches (e.g. spare parts producers) requires the tools for placing data about the company and its products. Furthermore, it needs the tools for placing information about possibilities of the order realisation, contact data for commercial documents interchange (order, order confirmation, advice note, invoice) and building integrated supply chains.

The system fulfills the standards of data interchange EAN-UCC (e.g. GLN - Global Location Number, EDIFACT communiqués) and constitutes the platform of cooperation and realisation of international economic processes.

The project of e-Procurement system includes:

- supplier database (sellers),
- product database (spare parts),
- client database (buyers),
- mechanism of concluding agreements (purchase, order realisation, commercial documents interchange, monitoring of order state),
- administrator module serving for managing data and catalogue's clients,
- interface for interchanging data in the process of procurement.

The proposed system was adjusted to the requirements of producers and distributors of spare parts and vehicle accessories in order to create electronic platform in motor industry. The functional and informatics scheme of the system is presented in Fig. 2.

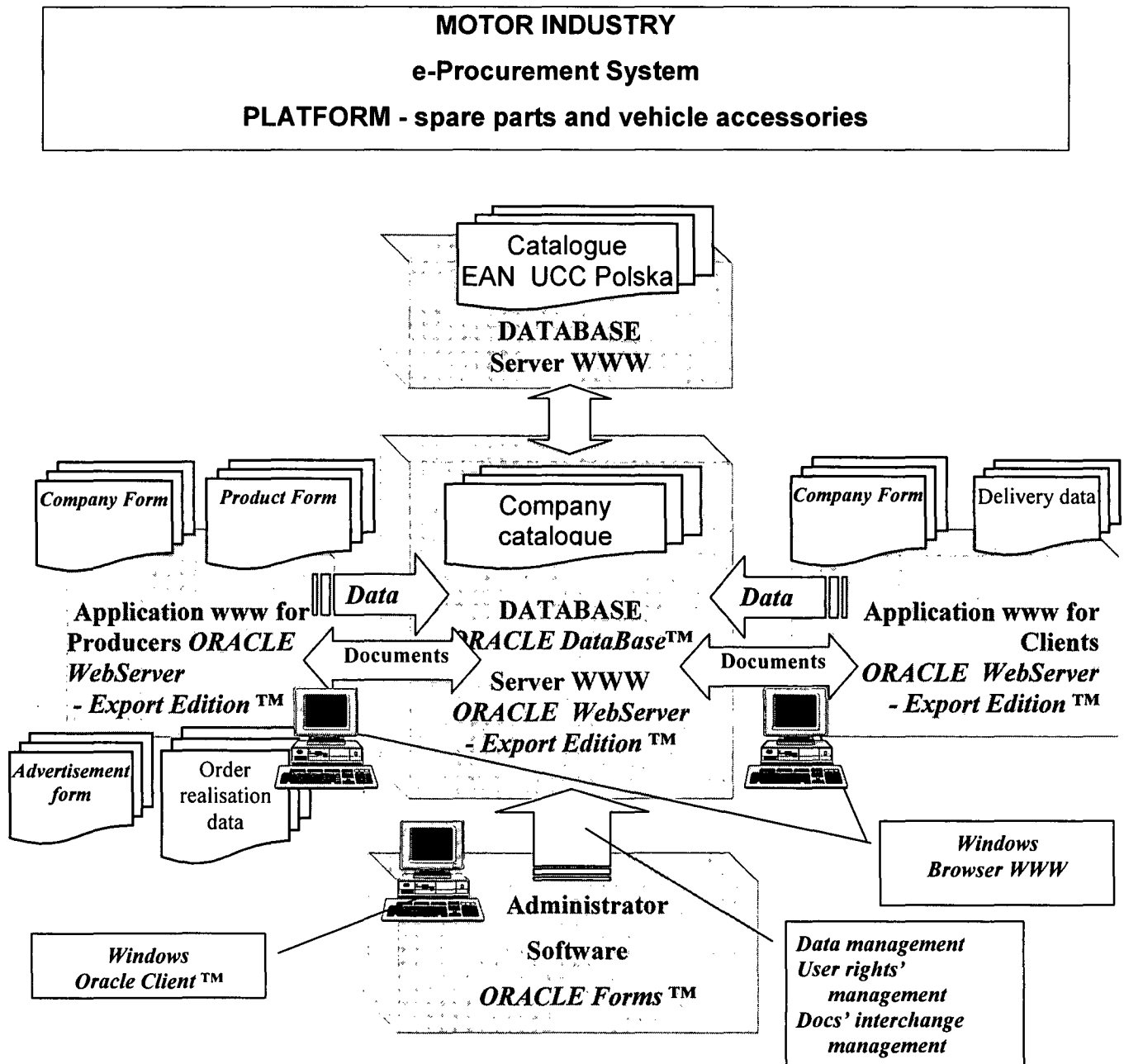


Fig. 2. Functional and informatics scheme of the e-Procurement system

There are two groups of participants of the system: system administrator and system user.

For the system user the webpage of the system has the following functionalities:

- * unrestricted access to the information resources - browsing suppliers and their products,

- * restricted access authenticated by the user account and the entered password (entitlement to full commercial agreement),
- * entering contact data of the company with the use of electronic forms (register form) and data about company's products (possibility of modifying and deleting data),
- * possibility of reserving the right for access to contact data,
- * browsing the internal catalogue of products offered by producer, distributor, wholesaler, retailer etc. by:
 - the name or part of the name of a product,
 - the branch and group of a product,
 - selected company,
 - product label (e.g. EAN.UCC);
- * browsing the catalogue of companies by:
 - the name or part of the name of a product,
 - the branch and group of a product,
 - localisation - town, street etc.,
 - product label,
 - localisation label (EAN.UCC),
- * ordering products selected from the internal catalogue and dispatching the products to the addressee,
- * browsing the placed orders and tracking the realisation of orders according to the state of order:
 - order already placed,
 - order accepted to realisation - after confirmation,
 - order in the process of preparing and delivering the dispatch - after notifying,
 - order realised - after forwarding the invoice.
- * realising full and safe purchasing - selling,
- * interchanging commercial communiqués/documents: order, order confirmation, changes, advice note, invoice,
- * browsing and searching communiqués,
- * placing advertisements about the company and its products on the website,

- * working in a selected language (Polish, English, German),
- * working with the use of applications available in the internet.

For the system administrator the webpage of the system has the following functionalities:

- * access to the database - entering, editing, modifying and deleting data,
- * managing the user of the system:
 - adding new system users and allocating new accounts,
 - restricting/unrestricting access to the user's account - temporary option,
 - connecting the users in groups of supply chains and co-operation; the groups have the access to the separated intranet channels of individual communication; entitling the users to the access to the group of offers,
- * monitoring the users' work - the number of given and paid XML communiqués, browsing communiqués, the number and value of transactions,
- * using the applications available through *Oracle Client*,
- * the administrator language is Polish, English or German.

The informatics environment includes:

- ❖ the database managing system and database - *ORACLE DataBase™* - servers of database
- ❖ server www - *ORACLE WebServer - Export Edition™* enabling internet communication between server of the system and the users.

Three elements constitute the informatics platform of the e-Procurement system: *Oracle Database Enterprise Edition*, *Oracle Web Application Server* with the system RDBMS (for managing relative databases), and *Oracle Client* (installed on the administrator's PC). It is professional, effective and safe database operating on the operation system, e.g. *Windows NT*. *Oracle Database* is dedicated to building data wholesales and to the systems processing data. The set of tools used for producing the user application constitute: *Oracle Designer* and *Oracle Developer* :

- * *Oracle Designer* - supports graphic modeling of complex informatics systems (process engineering, analysis, designing),

- * *Oracle Developer* - enables fast and cheap construction of complex applications supported by common repository, flexible service of different modeling methods and open portable architecture of informatics system.

The tools *Oracle Migration Assistant* employed for migration of data and applications from the environments of *Microsoft Access*, *Microsoft SQL Server* and *Sysbase*, enable unfailing intersystem engineering, replication and transmission of other data (including databases of companies or other procurement systems').

In the *Oracle* informatics system, the layer of application linking *Oracle8 Client (user)* with *Oracle8 Database (server)* is placed between the layer of the user and the layer of database. Its main task is to carry out the programmed logical algorithms. In addition, it balances the overloaded server in case of more than one application server. This layer consists of a few elements installed along with the database:

- Server of forms and reports - *Oracle Forms and Report Server*,
- Internet server - *Oracle Web Application Server*.

Oracle Forms Server ensures communication between the form currently highlighted on the user's screen and the database server and downloads necessary data. *Oracle Forms Server* directs screen forms to JVM (*Java Virtual Machine*) operating on the user's PC (*Oracle Client*), highlights data in this form and changes data on the basis of the information provided by the user. Furthermore, *Oracle Forms Server* cumulates data and highlights them on the screen when rewinding the list of transactions, offers, clients etc. It allows optimisation of the motion in local network of the e-Procurement system. *Oracle Web Application Server* is in charge of maintaining the calls for HTTP coming from the browser of the user. The calls are directed to the *Web Listener Process* being the part of the *Web Oracle Application Server*. This process analyses the syntax of the calls for HTTP and on this basis it returns HTML page to the user's browser or directs the call to *Web Oracle Application Server* and to the proper module of system software (*ConText Cartridge*). The application's logic is realised by the procedures stored in the database of the server and called by *PL/SQL Cartridge* (module *Web Oracle Application Server*).

Working with web pages of the system requires the browsers serving *JavaScript* language, such as *Microsoft Internet Explorer* or *Netscape*.

2. FUNCTIONALITIES OF THE E-PROCUREMENT SYSTEM

The system consists of three modules realising the functions specified in the "Terms of Reference".

Module A - allows to insert the delivery inquiry by the purchase departments. It aims to facilitate the Polish producers to contact with the purchase department of the vehicles' producers or the first level suppliers owning factories or the purchase departments in Poland. It also aims to facilitate the Representatives of those companies to search for the Polish producers of vehicles' parts, that would like to deliver for the first assemblage or produce under the purchaser's brand.

Functions realized by the system in this module

1. Registration of the purchase departments of the companies searching for suppliers in the system.
2. Entering the delivery inquiries into the system and deleting them after the sell-by date.
3. Mailing through the system the information to the parts' producers about the received delivery inquiry. The delivery inquire is mailed to the producers that produce the parts searched through the system.
4. Searching for the delivery inquiry by either the purchase department name or the name of a part.
5. Searching for the address of the purchase departments.

Module B should facilitate the Polish producers to contact with the distributors and service networks' offices.

Functions realized by the system in this module

1. Registration of the distributors or service networks' offices in the system.
2. Entering the requisitions for spare parts and deleting them out of the system.
3. Searching for the requisitions for spare parts, introduced to the system by the distributors or service networks' offices by either the company's name or the name of the searched part.

4. Searching for the address of the purchase departments.

Module C enables the Polish producers to place the offers on first assemblage supplies and the spare parts market in Poland in the system and facilitate the contact with the customers.

Functions realized by the system in this module

1. Registration of the producers in the system.
2. Placing the offers on first assemblage supplies and the spare parts market by the producers. Prices will be negotiated bilaterally.
3. Searching for the producers' offers by either the name of an item or the manufacturer's name.
4. Searching for the address of the manufacturer.
5. Mailing the offers through the system to the chosen business partners from the list.

The study includes the designs of the screens.

The presented screen is lighted up in the "menu".

Meanings of the colors used in the study and in forms

1. **black** – information available to the user, presented on the screen
2. **blue** – information available only to the programmer
3. **green** – active field or the keys available permanently or being activated after logging, opening the screen with the document. The numbers are explained in table 2.
4. **red** – data updated by the system automatically
5. **red, italics** – the example of how the document should be filled with the updated data

Table 1. e-procurement system database

Table	Name of the table	Discription
A	Producers of parts	Index (key) records from R3 form
B	Purchase departments	Index (key) records from R1 form
C	Distributors	Index (key) records from R2 form
D	Producers' offers	Index (key) records from first

		assemblage supplies and the spare parts market form
E	Delivery inquiry	Index (key) records from Z1 form
F	Requisition for spare parts	Index (key) records from C1 form
G	Library of Product Assortment	Index (key) records present the name of an item in Polish, English and Ukrainian

Table 2. Content of active fields and function keys

Index	Name of the window	Active	Active after logging
R1	Application form	X	
R2	Application form	X	
R3	Application form	X	
R4	HELP – contact with Admin (tel., e-mail, etc.)	X	
C1	Form for data entering		X
C2	Report for data searching		X
C 2.1	Report for data searching		X
C3	Report for data searching		X
P1	Form for first assemblage supplies (OE)		X
P2	Form for spare parts market supplies (AM)		X
P3	List of producers - report		X
P 3.1	Offer - report		X
P 3.2	Manufacturer's address - report		X
Z1	Form for data entering		X
Z2	Report for searching the data		X
Z 2.1	Report for searching the data		X

Main site of the e-Procurement system
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**AUTOMOTIVE INDUSTRY
PLATFORM of vehicle parts and accessories**

Main site	Registration	Module A	Delivery inquiries	Module B	Spare parts	Module C	Producer offers
-----------	--------------	----------	--------------------	----------	-------------	----------	-----------------

This system is designed for establishing contacts between Polish parts producers and sales departments of primary vehicle producers and purchase departments of distributors and service networks.

The system consists of 3 thematic modules A, B, C designed for particular users.
Search for first assemblage supply

- This system module is designed for sales departments of primary vehicle producers and suppliers whose factories or sales departments are headquartered in Poland. It is intended to enable search for Polish producers of spare parts who intend to make a first assemblage supply or produce using purchaser's brand name.

Requisition for spare parts market

- This system module is designed for distributors and service networks. It enables the requisition for parts for spare parts market in Poland.

Offers of parts producers

- This system module is designed for Polish parts' producers interested in first assemblage supply or deliveries to spare parts market. It is intended to enable submission of a trade offer and enable contact and correspondence with contracting parties.

Currently there is the following number of inquiries in the system:

(number) delivery inquiries submitted by primary car producers and suppliers that can be seen in the database. It is possible to look through inquiries about parts delivery in the bookmark DELIVERY INQUIRIES

(number) offers of Polish parts producers from the SME sector. The offers may be looked through in the bookmark PRODUCERS OFFERS

(number) requisitions for parts run by distributors. The requisitions for parts may be looked through in the bookmark SPARE PARTS

In order to gain your access code and user system status, an appropriate form must be filled in the bookmark REGISTRATION.

Log in if you are a platform user

Insert the user name chosen at registration (.....) field to complete

Insert the received password (.....)field to complete click ENTER

NOTE in case of any problems when logging in, contact the administrator (help R4)

Registration to the system

**MOTOR INDUSTRY
vehicle parts and accessories**

Main site	Registration	Module A	Module B	Module C	Delivery inquiries	Producers offers	Spare parts
-----------	--------------	----------	----------	----------	--------------------	------------------	-------------

If you are a platform user, log in.
 Insert your user name chosen at registration (.....) Field to complete
 Insert the received password (.....) Field to complete click ENTER
NOTE in case of any problems when logging in, contact the administrator (help R4)

In order to use the platform you need to log in. User address data is needed in order to enable the system to automatically send chosen information after it has been inserted into the system.

In order to gain your access code and system user status fill in an appropriate form in accordance with the trade you represent:

- primary vehicle producer or supplier (registration form R1)
- warehouse, distributor or service workshop (registration form R2)
- Polish producer of parts or accessories (registration form R3)

Without logging in, it is possible to look through lists of searched or offered parts, registered by the system in the inquiries and offers.

Producers' offers

**MOTOR INDUSTRY
PLATFORM of vehicle parts and accessories**

Main site	Registration	Module A	Delivery inquiries	Module B	Spare parts	Module C	Producers offers
-----------	--------------	----------	--------------------	----------	-------------	----------	------------------

Offers of spare parts' producers

If you are a platform user, log in
 Insert your user name chosen at registration (.....) Field to complete
 Insert the received password (.....) Field to complete click ENTER
NOTE in case of any problems when logging in, contact the administrator (help R4)

If you want to become a user, register on the site REGISTRATION pages
Insertion and search window is being activated after logging in

INSERTION OF PRODUCERS OFFERS

In order to insert an offer for first assemblage supply, the following form should be completed (form OE P1)

In order to insert an offer for delivery of parts for spare part market, the following form should be completed (form AM P2)

SEARCH FOR OFFERS

Search for business offers of producers by product name

Insert the name of a product or chose the name from the list

(P3.....) ENTER Library of Product Assortment

Search by producer name

Insert producer name (P3.1, P3.2.....) ENTER

There appears a report page with reports P. 3, P3.1 and P3.2 for a chosen producer

Spare parts

Main site	Registartion	Module A	Delivery inquiries	Module B	Spare parts	Module C	Producers offers
-----------	--------------	-------------	-----------------------	-------------	----------------	-------------	---------------------

Requisition for spare parts supplied to the market

If you are a platform user, log in. Insert your user name chosen at registration

(.....) Field to complete

Insert the received password (.....) Field to complete - klik ENTER

NOTE In case of any problems when logging in, contact the administrator (help R4)

If you want to become a user, register on the REGISTRATION page
Insertion and search window is being activated after logging in

INSERTION OF OFFERS OF DISTRIBUTORS AND SERVICE NETWORKS

In order to insert requisition for spare parts (ZZC) supplied to the market, the following form should be completed (form C1) - inserts data to the table C

SEARCHING

Search for the product by name or choose the name from the list (C2.....
.....) ENTER Library of Product Assortment

Search for requisition for spare parts by the name of distributor or service network
(.C3.....) ENTER

There appears a report page with reports C.2, C 2.1, C3 for a selected distributor or service network.

Module A

**MOTOR INDUSTRY
PLATFORM of vehicle parts and accessories**

Main site	Registration	Module A	Delivery inquiries	Module B	Spare parts	Module C	Producers offers
-----------	--------------	----------	--------------------	----------	-------------	----------	------------------

Search for part suppliers of first assemblage supply

This System Module enables sales departments to insert delivery inquiries into the system. It is intended to enable Polish producers to contact with sales departments of primary vehicle producers and deliverers whose factories and sales departments are headquartered in Poland. It is also intended to help representatives search for Polish producers of spare parts who want to make a first assemblage supply or produce using purchaser's brand name.

Producers, potential suppliers of a given part registered in the system data base will be notified of insertion of delivery inquiry into the system. Insertion of the following information is possible along with delivery inquiry:

- mechanical drawings of parts
- general requirements for a supplier

Currently (date) there is the following number of enquiries in the system:

(number) sales departments of primary vehicle producers and suppliers

(number) business departments of distributors and service networks

(number) offers of Polish producers

If you want to become a user, register on the site REGISTRATION pages

After registration you may insert your delivery inquiries into the system, completing the form Z1 in the bookmark DELIVERY INQUIRIES

Log in if you are a platform user
 Insert the user name chosen at registration (.....) field to complete
 Insert the received password (.....)field to complete click ENTER
NOTE in case of any problems when logging in, contact the administrator (help R4)

Parts' producers will be notified of the appearance of delivery inquiries by the system. The information will be sent to producers who will have the searched part in their assortment registered in the system.

Module B

MOTOR INDUSTRY
PLATFORM of vehicle parts and accessories

Main site	Registration	Module A	Delivery inquiries	Module B	Spare parts	Module C	Producers offers
-----------	--------------	----------	--------------------	----------	-------------	----------	------------------

Requisition for parts of distributors and service networks

This System Module enables business departments of distributors and service networks to make requisition for parts in the system. It is intended to facilitate contact between Polish producers and business departments. It is also designed to facilitate representatives to search for Polish producers of vehicle part who intend to supply spare parts market.

The system enables a producer to send the offer directly to the person who makes requisition for spare parts.

Currently there is the following number of address data in the system data base:
 (number) sales departments of primary vehicle producers and suppliers
 (number) business departments of trade distributors and service networks
 (number) offers of Polish producers

If you want to become a user, register on the site REGISTRATION pages

After registering, you may insert your requisition for parts into the system, completing the form C1 in the bookmark SPARE PARTS

If you are a platform user, log in
 Insert your user name chosen at registration (.....) Field to complete
 Insert the received password (.....) Field to complete click ENTER
NOTE in case of any problems when logging in, contact the administrator (help R4)

Parts' producers will be notified of the appearance of delivery inquiry by the system.

The information will be sent to producers who will have the searched part in their assortment registered in the system.

Module C

MOTOR INDUSTRY
PLATFORM of vehicle parts and accessories

Main site	Registration	Module A	Delivery inquiry	Module B	Spare parts	Module C	Producers offers
-----------	--------------	----------	------------------	----------	-------------	----------	------------------

Offers of parts' producers

This System Module enables Polish producers to place their trade offers in the system. It is designed to facilitate contact between Polish producers and business departments of distributors and service networks as well as with sales departments

of primary vehicle producers and suppliers whose factories or sales departments are headquartered in Poland. It is also designed to facilitate representatives of these companies to search for Polish producers of vehicle parts and accessories. This system enables the producers to send their offer directly to the person who has made requisition for parts or delivery inquiry.

Currently (precise date) there is the following number of address data in the system data base.

(number) sales departments of primary vehicle producers and suppliers

(number) business departments of distributors and service networks

(number) offers of Polish producers

If you want to become a user, register on the site REGISTRATION pages

Log in if you are a platform user
 Insert the user name chosen at registration (.....) field to complete
 Insert the received password (.....)field to complete click ENTER
NOTE in case of any problems when logging in, contact the administrator (help R4)

After registering you may enter your offer into the system completing the OE or AM form in the bookmark PRODUCERS OFFERS

Parts' producers will be notified of the appearance of inquiries about delivery by the system. The information will be sent to producers who will have the searched part in their assortment registered in the system.

Delivery inquiry

MOTOR INDUSTRY
 PLATFORM of vehicle parts and accessories

Main site	Registration	Module A	Delivery inquiries	Module B	Spare parts	Module C	Producers offers
-----------	--------------	----------	--------------------	----------	-------------	----------	------------------

Delivery inquiries of primary vehicle producers or suppliers

Log in if you are a platform user
 Insert the user name chosen at registration (.....) field to complete
 Insert the received password (.....)field to complete click ENTER
NOTE in case of any problems when logging in, contact the administrator (help R4)

If you want to become a user, register on the site REGISTRATION pages
 Insert and search window becomes activate after logging in

(window) ENTERING

For primary vehicle producers or suppliers

In order to insert a delivery inquiry of first assemblage supply, it is necessary to fill in the form (form Z1)

(window) SEARCHING

Search for delivery inquiries of OE parts registered in the system by product name (raport Z2)

Form for spare parts' market supplies AM

For producers of spare parts and automobile accessories interested in supplying their products to the market.

By filling in the form with their data, producers become the platform users and after entering the login they are able to display their offers on the platform.

(serves for the offer registration and entering data to the database "Offers of spare parts producers").

No.	Data	Fill in the blanks	Comments
1	Application date	date	
2	Offer validity	date	permanent with a deadline
20	Names of offered spare parts ENTER	Text - reference book	Option of entering more than one (7)
21	Product with homologation according to EKG ONZ No....(choose one) ENTER	text	yes no n/a
22	Producer declaration: product with quality close to the original (GVO)	text	yes /no
23	Catalogue of the offered products including: <ul style="list-style-type: none"> the spare part's number in the producer's catalogue the spare part's number according to the vehicle producer available on the web site of the spare parts producer.	text	Web site Link to the catalogue on the web site
24	Spare parts available for following vehicle makes:	text	Option of entering more than one (9)

NOTE

The names of spare parts entered into the form for the first time are inserted into the table "Library of Product Assortment".

NOTE

Data entered into the form are automatically copied into the proper table. The offer receives the password generated by the system. One user can present more than one offer.

Data required for creating the table are presented in "System description".

Form for first assemblage supplies OE
--

For producers of spare parts and automobile accessories interested in supply for first assemblage.

By filling in the form with their data, producers are able to display their offers on the platform.

(serves for offer registration and entering data to the database "Offers of spare parts producers")

No.	Data	Fill in the blanks	Comments
1	Application date	Date	
2	Offer validity	Date	permanent with a deadline
20	Names of spare parts ENTER	Text - reference book	Option of entering more than one (7)

NOTE

The names of spare parts entered into the form for the first time are inserted into the table "Library of Product Assortment".

NOTE

Data entered into the form are automatically copied into the proper table. The offer receives the password generated by the system. One user can present more than one offer. Data required for creating the table are presented in "System description".

Form for data entering Z1

For purchase departments of vehicle producers and primary suppliers

By filling in the form with their data, merchants are able to display on the platform their inquiries for supply for accessories.

(serves for making a requisition for spare parts and entering data to the table E "Delivery inquiry")

No.	Data	Fill in the blanks	Comments
1	Application date	Date	
2	Deadline for making offer	Date	
20	Names of spare parts ENTER	Text - reference book	Option of entering more than one (9)
21	Number of the spare part's picture	Text	Attached to the spare part's name
22	Requirements for suppliers	Text	Attachement

NOTE

The names of spare parts entered into the form for the first time are inserted into the table "Library of Product Assortment".

NOTE

Data entered into the form are automatically copied into the proper table. The inquiry receives the password generated by the system. One user can make more than one inquiry.

Data required for creating the table are presented in "System description".

Application form R1

For purchase departments of vehicle producers and primary suppliers

By filling in the form with their data, merchants become the platform users and after entering the login they are able to make the requisition for the spare parts on the platform.

(serves for entering data to the table B „Purchase departments”

No.	Data	Fill in the blanks	Comments
1	Application date	date	
2	Company name	Text	
3	Plant's name of the merchant	Text	
4	Postcode	Text	
5	Post office	Text	
6	City/town	Text	
7	Address	Text	
8	Contact person	Text	
9	Position	Text	
10	Telephone no.	Text	
11	Fax	Text	

12	e-mail	Text	
13	Web site	Text	
14	Production profile – names of spare parts ENTER	Text - Reference book	Option of entering more than one
15	User name (login) - max. 6 characters	text	
Click ENTER			
K	Password - generated for user from database	User password	One letter and three numbers

IMPORTANT REMARKS !

The user name (entered in 15. item) and the generated password will be always used when entering the system.

In order to make an inquiry for supply, click on the bookmark "Delivery inquiry".

NOTE

Data entered into the form are automatically copied into the proper table. The user receives the password generated by the system. The password consisting of one letter and three-digit number is displayed in the form after clicking ENTER. Data required for creating the table are presented in "System description".

Application form R2

For car dealers and service stations

By filling in the form with their data, car dealers and service stations become the platform users and after entering the login they are able to make the requisition for the spare parts on the platform.

(serves for entering data to the table C „Distributors”)

No.	Data	Fill in the blanks	Comments
1	Application date	date	
2	Company name	Text	
3	Legal form	Text	
4	No. in the Register of Companies	Text	
5	Date of establishment	date	
6	Postcode	Text	
7	Post office	Text	
8	City	Text	
9	Address	Text	
10	Contact person	Text	
11	Position	Text	
12	Telephone no.	Text	

13	Fax	Text	
14	e-mail	Text	
15	Web site	Text	Web site of the products catalogue
16	Requisition - names of spare parts ENTER	Text-reference book	Option of entering more than one
15	User name (log in) - max. 6 characters	text	
Click ENTER			
K	Password - generated for user from database	User password	One letter and three numbers

IMPORTANT REMARKS

The user name (entered in 15. item) and the generated password will be always used when entering the system.

In order to make a requisition, click on the bookmark "Spare parts market".

NOTE

Data entered into the form are automatically copied into the proper table. The user receives the password generated by the system. The password consisting of one letter and three-digit number is displayed in the form after clicking ENTER. Data required for creating the table are presented in "System description".

Application Form R3

For producers of spare parts and automobile accessories

By filling in the form with their data, producers become the platform users and after entering the login they are able to display their offers on the platform.

(serves for user registration and entering data to the table A "Spare parts producers")

No.	Data	Fill in the blanks	Comments
1	Application date	Date	
2	Company name	text	
3	Legal form	text	
4	No. in the Register of Companies	text	
5	Date of establishment	text	
6	Certificate ISO 9001	selection	yes / no
7	Certificate ISO/TS 16 949	selection	yes / no
8	Certificate QS-9000	selection	yes / no
9	Certificate VDA 6.1	selection	yes / no
10	Postcode	text	

11	Post office	text	
12	City	text	
13	Address	text	
14	Contact person	text	
15	Position	text	
16	Telephone no.	text	
17	Mobile	text	
18	Fax	text	
19	e-mail	text	
20	Web site	text	
23	Production profile - names of spare parts ENTER	Text - reference book	Option of entering more than one product (7)
24	Current clients (enter the names)	text	
25	User name (log-in) - max. 6 characters	text	
Click ENTER			
K	Password - generated for user from database	User password	One letter and three numbers

IMPORTANT REMARKS

The user name (entered in 25. item) and the generated password will be always used when entering the system.

In order to present the offer, click on the bookmark "Offers of spare parts producers".

NOTE!

Data entered into the form are automatically copied into the table A. The user receives the password generated by the system. The password consisting of one letter and three-digit number is displayed in the form after clicking ENTER. Data required for creating the table are presented in "System description".

Form for data entering C1 - ZZC
--

For car dealers and service stations interested in buying spare parts

By filling in the form with their data, dealers and service stations are able to display their needs for spare parts on the platform.

(serves for making a requisition for spare parts and entering data to the table "Requisition for spare parts")

No.	Data	Fill in the blanks	Comments
1	Application date		
20	Names of spare parts ENTER		Option of entering more than one (9)

21	Vehicle makes		Option of entering more than one make (7)
22	Identification of spare parts <ul style="list-style-type: none"> the spare part's number in the producer's catalogue 		
23	Identification of spare parts <ul style="list-style-type: none"> the spare part's number according to the vehicle producer 		Web site Link to the catalogue on the web site

NOTE

The names of spare parts entered into the form for the first time are inserted into the table "Library of Product Assortment".

NOTE

Data entered into the form are automatically copied into the proper table. The requisition receives the password generated by the system. One user can make more than one requisition.

Data required for creating the table are presented in "System description".

Report Z 2

List of purchase departments of the vehicles' producers or first level suppliers searching for (name of a part)

L. p	purchase department	application date	deadline for offers' application	number of the part's drawing - enclosure	supplier's requirements - enclosure
1	DELPHI			nnnnnnnnnn	Hhhhhhh
2	TRW			hhhhhhhhhhh	kkkkkkkk
3	OPEL				

To look through the enclosure click on the record

To start the correspondence an e-mail window needs to be opened (open) outlook standard

Add an e-mail to the mailing list (add)

To get the address of the chosen (highlighted) purchase department (C 2.1 address)
ENTER C 2.1 report appears

Z 2.1 Report

Purchasing department address (name)

Contact person	Name and surname	Zip code	.....
Position	.....	Post office	.....
Tel.	.....	City	.....
Mobile	.....	Street	.....
fax	.....	e-mail	

C2 Report

List of distributors or service networks searching for (name of a part)

L.p	distributor or service network	vehicle's make	number of the vehicle's part according to the producer's catalogue	number of the part according to the searcher's catalogue	catalogue of products on the searcher's website
1	INTER TEAM	Opel	xxxxxxxxxxxx	nnnnnnnnnn	
		Honda	zzzzzzzzzzzz	mmmmmmmm	
2	AD Polska	Fiat	mmmmmmmm	hhhhhhhhhh	

C3 Report

Distributor or service network (name) is looking for

application date	part	vehicle's make	number of the vehicle's part according to the producer's catalogue	number of the part according to the searcher's catalogue
24.12.2004	Brake pads	Opel	nnnnnnnnnn	yyyyyyyyy
	Wires	Mazda	jjjjjjjjj	iiiiiiiiii

To start the correspondence an e-mail window needs to be opened (open) outlook standard

Add an e-mail to the mailing list (add)

To get the address of the chosen (highlighted) distributor or service network (C 2.1 address) ENTER C 2.1 report appears

C 2.1 Report

Distributor or service network address (name of a searcher)

Contact person	Name and surname	Zip code	.....
Position	.....	Post office	.....
Tel.	.....	City	.....
Mobile	.....	Street	.....
fax	.....	e -mail	.....

P3 Report

Producers (name of a part)

L.p	producer (how to fill in)	year of establishment	certificate of quality	current customers	websites
1	MOTGUM	1987	ISO 9001 ISO/TS 16949 QS-9000	AD Polska FSO	
2	TORSTAR	1978	brak	Polmozbyt T	

To start the correspondence an e-mail window needs to be opened (open) outlook standard

Add the producer's e-mail to the mailing list (add)

The entire offer of the chosen (highlighted) producer (P 3.1 offer) ENTER P 3.1 report appears

To get the address of the chosen (highlighted) producer (P3.2 address) ENTER P 3.2 report appears

P3.1 Report

Producer (name) offers

name of a part	certification of approval reg	brand of a vehicle	catalogue of products - website (link)
Brake pads	EKG ONZ 90	Opel, Honda, VW,	
Wires	Does not occur	Mazda, Opel, Fiat	

P3.2 Report

Producers' address (name)

Contact person	Name and surname	Zip code
Position	Post office
Tel.	City
Mobile	Street
fax	e -mail

3. TRADE DOCUMENTS EXCHANGE IN E- PROCUREMENT SYSTEM

Trade documents implemented in e-Procurement system were modeled on the standards of trade documents transmitted according to the protocol and requirements of EDI-EANCOM (*Electronic Data Interchange*) transmission. This standard for the reason of little usage in economic practice of enterprises present in the market, has been applied as a model in the extent of:

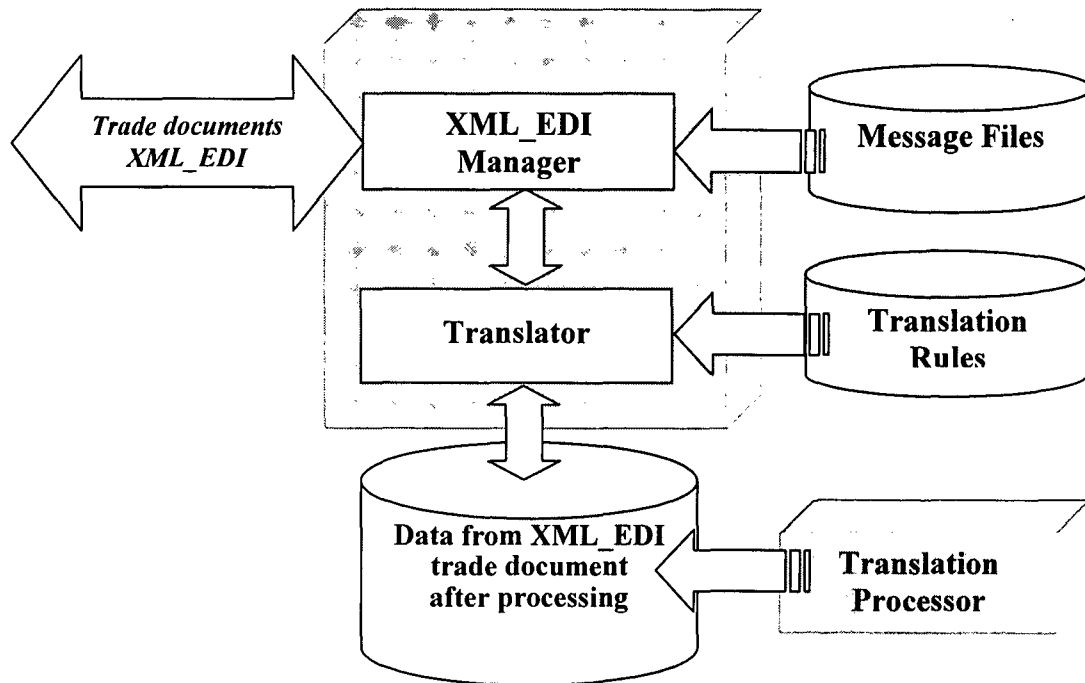
- type and scope of information impinging on the data specification present in trade documents,
- quantity and order of occurrence of individual fields in trade documents.

The matter of transmission of documents through electronic platform of e-Procurement system, for the reason of practical need for the integration of many clients, using standard equipped computer stations (without the possibility to translate standard EDI messages) has been optionally established:

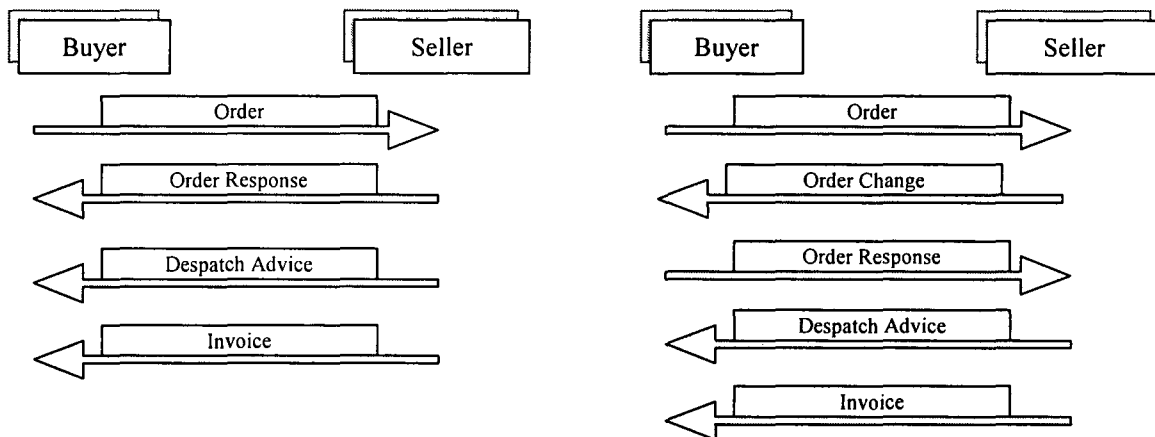
- XML_EDI transmission protocol (*eXtensive Markup Language*) for the purpose of trade documents exchange,
- forms of trade documents with the usage of direct data transfer to the database of Electronic Catalogue through TCP/IP (*Transmission Control Protocol / Internet Protocol*). Communication method through data entered into formatted data fields within forms available through WWW sites of the client and the producer.

Picture 2 presents the communication interface of trade documents within the XML_EDI standard. Presented hardware and software interfaces are to complete the outgoing and ordered data into communication fields and synchronization fields required for the XML_EDI transmission and to read and recognize synchronization data within the incoming documents.

Picture 2 XML_EDI Interface of Electronic Catalogue which makes possible the transmission and translation of electronic trade documents.



In practical application of the trade transaction executed through e-Procurement system following relations can occur:



In this chapter five trade document standards will be presented:

- Order - ORDER
- Order Change - ORDERCHG
- Order Response - ORDRSP
- Despatch Advice - DESADV
- Invoice - INVOIC

Below each of these standard documents has been presented in electronic version of messages with reference to the possibilities of its' implementation in Electronic Catalogue of EAN_UCC labeled products.

ORDER

Document type (message type) : **ORDER**

Edition (*reference directory*) : D.96.A

Version EANCOM : 008

Document which specifies the type of goods or services ordered according to the terms agreed beforehand by the buyer and the seller.

Document Structure - ORDER

Shaded lines are mandatory synchronization and translation elements for the purpose of electronic transmission and are not connected to the document content.

Code	No.	Status	No. of signs	Specification
<u>UNH</u>	1	M	1	<u>Message Header</u>
<u>BGM</u>	2	M	1	Message Beginning
<u>DTM</u>	3	M	35	Date / time / period
<u>PAI</u>	4	C	1	Payment Instructions
<u>ALI</u>	5	C	5	Additional Information
<u>FTX</u>	6	C	99	Free text
<u>SG1</u>		C	10	RFF-DTM

Code	No.	Status	No. of signs	Specification
<u>RFF</u>	7	M	1	References
<u>DTM</u>	8	C	5	Date / time / period
<u>SG2</u>		C	99	NAD-LOC-SG3-SG5
<u>NAD</u>	9	M	1	Name and address
<u>LOC</u>	10	C	25	Place / Location Identification
<u>SG3</u>		C	10	RFF
<u>RFF</u>	11	M	1	References
<u>SG5</u>		C	5	CTA-COM
<u>CTA</u>	12	M	1	Contact address
<u>COM</u>	13	C	5	Contact numbers
<u>SG6</u>		C	5	TAX-MOA
<u>TAX</u>	14			Duty / tax / fee information
<u>MOA</u>	15	C	1	Monetary value
<u>SG7</u>		C	5	CUX-DTM
<u>CUX</u>	16	M	1	Currencies
<u>DTM</u>	17	C	5	Date / time / period
<u>SG8</u>		C	10	PAT-DTM-PCD-MOA
<u>PAT</u>	18	M	1	Payment terms basis
<u>DTM</u>	19	C	5	Date / time / period
<u>PCD</u>	20	C	1	Percentage detail
<u>MOA</u>	21	C	1	Monetary value
<u>SG9</u>		C	10	TDT-SG10
<u>TDT</u>	22	M	1	Transport Detail
<u>SG10</u>		C	10	LOC
<u>LOC</u>	23	M	1	Place / Location Identification
<u>SG11</u>		C	5	TOD-LOC
<u>TOD</u>	24	M	1	Delivery or Transport Terms

<u>Code</u>	<u>No.</u>	<u>Status</u>	<u>No. of signs</u>	<u>Specification</u>
<u>LOC</u>	25	C	2	Place / Location Identification
<u>SG18</u>		C	15	ALC-ALI-DTM-SG19-SG20-SG21-SG22-SG23
<u>ALC</u>	26	M	1	Allowances or charges
<u>ALI</u>	27	C	5	Additional information
<u>DTM</u>	28	C	5	Date / time / period
<u>SG19</u>		C	1	QTY-RNG
<u>QTY</u>	29	M	1	Quantity
<u>RNG</u>	30	C	1	Range
<u>SG20</u>		C	1	PCD-RNG
<u>PCD</u>	31	M	1	Percentage details
<u>RNG</u>	32	C	1	Range
<u>SG21</u>		C	2	MOA-RNG
<u>MOA</u>	33	M	1	Monetary value
<u>RNG</u>	34	C	1	Range
<u>SG22</u>		C	1	RTE-RNG
<u>RTE</u>	35	M	1	Rate
<u>RNG</u>	36	C	1	Range
<u>SG23</u>		C	5	TAX-MOA
<u>TAX</u>	37	M	1	Duty / tax / fee information
<u>MOA</u>	38	C	1	Monetary value

ORDER CHANGE

Document type (message type) : **ORDCHG**

Edition (*reference directory*) : D.96.A

Version EANCOM : 005

Document (message) sent by the buyer to the seller, defining the details of changes which should be made to the order.

Buyer may request some changes to the order concerning one or more items or may cancel the order for specified goods or services. The document *Order Change* may concern goods or services mentioned in one or more delivery schedules. The document *Order Change* concerning international transactions may include additional information e.g. concerning duty or statistical. The document *Order Change* may include transport and delivery detail.

Document Structure *ORDER CHANGE*

<u>Code</u>	<u>No.</u>	<u>Status</u>	<u>No. of signs</u>	<u>Specification</u>
<u>UNH</u>	1	M	1	<u>Message Header</u>
<u>BGM</u>	2	M	1	Message Beginning
<u>DTM</u>	3	M	35	Date / time / period
<u>PAI</u>	4	C	1	Payment Instructions
<u>ALI</u>	5	C	5	Additional Information
<u>FTX</u>	6	C	99	Free text
<u>SG1</u>		C	10	RFF-DTM
<u>RFF</u>	7	M	1	References
<u>DTM</u>	8	C	5	Date / time / period
<u>SG3</u>		C	99	NAD-LOC-SG4-SG6
<u>NAD</u>	9	M	1	Name and address
<u>LOC</u>	10	C	25	Place / Location Identification
<u>SG4</u>		C	10	RFF
<u>RFF</u>	11	M	1	References
<u>SG6</u>		C	5	CTA-COM
<u>CTA</u>	12	M	1	Contact information
<u>COM</u>	13	C	5	Contact numbers
<u>SG7</u>		C	5	TAX-MOA
<u>TAX</u>	14	M	1	Duty / tax / fee information
<u>MOA</u>	15	C	1	Monetary value

Code	No.	Status	No. of signs	Specification
<u>SG8</u>		C	5	CUX-DTM
<u>CUX</u>	16	M	1	Currencies
<u>DTM</u>	17	C	5	Date / time / period
<u>SG9</u>		C	10	PAT-DTM-PCD-MOA
<u>PAT</u>	18	M	1	Payment terms basis
<u>DTM</u>	19	C	5	Date / time / period
<u>PCD</u>	20	C	1	Percentage detail
<u>MOA</u>	21	C	1	Monetary value
<u>SG10</u>		C	10	TDT-SG11
<u>TDT</u>	22	M	1	Transport Detail
<u>SG11</u>		C	10	LOC
<u>LOC</u>	+ 23	M	1	Place / Location Identification
<u>SG12</u>		C	5	TOD-LOC
<u>TOD</u>	24	M	1	Delivery or Transport Terms
<u>LOC</u>	25	C	2	Place / Location Identification
<u>SG19</u>		C	15	ALC-ALI-DTM-SG20-SG21-SG22-SG23-SG24
<u>ALC</u>	+ 26	M	1	Allowances or charges
<u>ALI</u>	+ 27	C	5	Additional information
<u>DTM</u>	+ 28	C	5	Date / time / period
<u>SG20</u>		C	1	QTY-RNG
<u>QTY</u>	+ 29	M	1	Quantity
<u>RNG</u>	30	C	1	Range
<u>SG21</u>		C	1	PCD-RNG
<u>PCD</u>	+ 31	M	1	Percentage details
<u>RNG</u>	+ 32	C	1	Range
<u>SG22</u>		C	2	MOA-RNG
<u>MOA</u>	+ 33	M	1	Monetary value

Code	No.	Status	No. of signs	Specification
<u>RNG</u>	34	C	1	Range
<u>RTE</u>	+ 35	M	1	Rate
<u>RNG</u>	+ 36	C	1	Range
<u>SG24</u>		C	5	TAX-MOA
<u>TAX</u>	+ 37	M	1	Duty / tax / fee information
<u>MOA</u>	+ 38	C	1	Monetary value

ORDER RESPONSE

Document type (message type) : **ORDRSP**
Edition (*reference directory*) : D.96.A
Version EANCOM : 005

This document sent from the seller to the buyer concerns the document *Order Response* or *Order Change*.

The response may concern one or more goods or services. The message may also fulfill the following functions:

- acknowledge the receipt and understanding of the message *Order Response*
- accept the message *Order Response*
- propose changes to *Order*
- acknowledge lack of acceptance for the whole or part of *Order Response*

The message *Order Response* may refer to goods or services named in one or more delivery schedules. The message *Order Response* concerning international transaction may include additional duty or statistical information. The message *Order Response* may include details concerning transportation, delivery place, delivery time etc. Depending on the practices applied at a particular company one or more *Order Response* may refer to one *Order*.

Document Structure *ORDER RESPONSE*

Code	No.	Status	No. of signs	Specification
<u>UNH</u>	1	M	1	Message Header
<u>BGM</u>	2	M	1	Message Beginning
<u>DTM</u>	3	M	35	Date / time / period
<u>PAI</u>	4	C	1	Payment Instructions
<u>ALI</u>	5	C	5	Additional Information
<u>FTX</u>	6	C	99	Free text
<u>SG1</u>		C	10	RFF-DTM
<u>RFF</u>	7	M	1	References
<u>DTM</u>	8	C	5	Date / time / period
<u>SG3</u>		C	99	NAD-LOC-SG4-SG6
<u>NAD</u>	9	M	1	Name and address
<u>LOC</u>	10	C	25	Place / Location Identification
<u>SG4</u>		C	10	RFF
<u>RFF</u>	11	M	1	References
<u>SG6</u>		C	5	CTA-COM
<u>CTA</u>	12	M	1	Contact information
<u>COM</u>	13	C	5	Contact numbers
<u>SG7</u>		C	5	TAX-MOA
<u>TAX</u>	14	M	1	Duty / tax / fee information
<u>MOA</u>	15	C	1	Monetary value
<u>SG8</u>		C	5	CUX-DTM
<u>CUX</u>	16	M	1	Currencies
<u>DTM</u>	17	C	5	Date / time / period
<u>SG9</u>		C	10	PAT-DTM-PCD-MOA
<u>PAT</u>	18	M	1	Payment terms basis
<u>DTM</u>	19	C	5	Date / time / period

Code	No.	Status	No. of signs	Specification
<u>PCD</u>	20	C	1	Percentage details
<u>MOA</u>	21	C	1	Monetary value
<u>SG10</u>		C	10	TDT-SG11
<u>TDT</u>	22	M	1	Transport Detail
<u>SG11</u>		C	10	LOC
<u>LOC</u>	23	M	1	Place / Location Identification
<u>SG12</u>		C	5	TOD-LOC
<u>TOD</u>	24	M	1	Delivery or Transport Terms
<u>LOC</u>	25	C	2	Place / Location Identification
<u>SG19</u>		C	15	ALC-ALI-DTM-SG20-SG21-SG22-SG23-SG24
<u>ALC</u>	26	M	1	Allowances or charges
<u>ALI</u>	27	C	5	Additional Information
<u>DTM</u>	28	C	5	Date / time / period
<u>SG20</u>		C	1	QTY-RNG
<u>QTY</u>	29	M	1	Quantity
<u>RNG</u>	30	C	1	Range
<u>SG21</u>		C	1	PCD-RNG
<u>PCD</u>	31	M	1	Percentage details
<u>RNG</u>	32	C	1	Range
<u>SG22</u>		C	2	MOA-RNG
<u>MOA</u>	33	M	1	Monetary value
<u>RNG</u>	34	C	1	Range
<u>SG23</u>		C	1	RTE-RNG
<u>RTE</u>	35	M	1	Rate
<u>RNG</u>	36	C	1	Range
<u>SG24</u>		C	5	TAX-MOA
<u>TAX</u>	37	M	1	Duty / tax / fee information

Code	No.	Status	No. of signs	Specification
<u>MOA</u>	38	C	1	Monetary value

DESPATCH ADVICE

Document type (message type) : **DESADV**

Edition (reference directory) : D.96.A

Version EANCOM : 005

The message gives detail information concerning goods shipped or ready to shipment according to the agreed terms.

Document *DESPATCH ADVICE* May be used to notification of the shipment of goods or return shipment of goods. The document is to transmit detail information on the delivered goods. A given document is connected with one seller and one buyer or their representatives. A given document is connected with one dispatch place and one or many delivery places. It can include information on many different goods and packages. Thanks to the document the receiver:

- knows when the goods have been shipped or when it will be ready to shipment;
- knows the content of the shipment in detail;
- may take introductory action to customs clearance in case of international shipment;
- Has the possibility to control whether the shipped package is adequate to the *Invoice*.

Document *DESPATCH ADVICE* should be always sent before actual delivery or goods return takes place. In this way the receiver may prepare himself to receive the shipment. Each delivered collective unit (pallet, carton etc.) may be unambiguously identified. The *DESPATCH ADVICE* document contains the description of all the goods within separate unambiguously identifiable collective units. Thanks to that after goods are delivered one can compare the content of the delivered package with the electronic message and easily identify differences.

EAN/UCC standard and serial Code of shipped units SSCC to label collective units adoption is advised.

Document *DESPATCH ADVICE* enables us to make hierarchical description of the shipment, beginning from the highest level (shipment) and ending on the lowest level (goods).

One can describe a container with 5 pallets, which consist of several large shipment units, which consist of several small shipment units. Proper trade units (at freely chosen hierarchy level agreed by trading partners) are named at the end. The hierarchical description of shipment structure is not obligatory. Simple and probably most often message usage is the enumeration of all the goods contained in the shipment with additional proper information on them (e.g. quantity, additional identification, etc.)

Document Structure - *DESPATCH ADVICE*

Code	No.	Status	No. of signs	Specification
<u>UNH</u>	1	M	1	Message Header
<u>BGM</u>	2	M	1	Message Beginning
<u>DTM</u>	3	C	10	Date / time / period
<u>SG1</u>		C	10	RFF-DTM
<u>RFF</u>	4	M	1	Reference
<u>DTM</u>	5	C	1	Date / time / period
<u>SG2</u>		C	10	NAD-SG3-SG4
<u>NAD</u>	6	M	1	Name and address
<u>SG3</u>		C	10	RFF
<u>RFF</u>	7	M	1	Reference
<u>SG4</u>		C	10	CTA-COM
<u>CTA</u>	8	M	1	Additional information
<u>COM</u>	9	C	5	Contact numbers
<u>SG5</u>		C	10	TOD-LOC
<u>TOD</u>	10	M	1	Delivery or Transport Terms
<u>LOC</u>	11	C	5	Place / Location Identification
<u>SG6</u>		C	10	TDT-SG7
<u>TDT</u>	12	M	1	Transport Detail

Code	No.	Status	No. of signs	Specification
<u>SG7</u>		C	10	LOC
<u>LOC</u>	13	M	1	Place / Location Identification
<u>SG8</u>		C	10	EQD-MEA-SEL
<u>EQD</u>	14	M	1	Equipment Details
<u>MEA</u>	15	C	5	Measures
<u>SEL</u>	16	C	25	Seal number

INVOICE

Document type (message type) : **INVOIC**
Edition (reference directory) : D.96.A
Version EANCOM : 008

The message requesting payment for goods or services delivered according to the agreed terms by the buyer and the seller.

A standard ONZ message of the type INVOICE with proper data is also a detailed description for the message type Debit Note and Credit Note. In connection to that, the reference to the message INVOICE may be interpreted wider – as to INVOICE / CREDIT NOTE / DEBIT NOTE.

The seller may issue an Invoice for one or more transactions. INVOICE may refer to goods or services connected with one or more orders, shipment instructions, phone order etc. INVOICE may include referrals to payment instructions. INVOICE concerning foreign transactions may include additional information for customs offices and for statistical purposes. INVOICE may include details of transportation.

Document structure - *INVOICE*

Code	Lp	Status	No. of signs	Specification
<u>UNH</u>	1	M	1	Message Header
<u>BGM</u>	2	M	1	Message Beginning
<u>DTM</u>	3	M	35	Date / time / period
<u>PAI</u>	4	C	1	Payment Instructions
<u>ALI</u>	5	C	5	Additional information
<u>FTX</u>	6	C	10	Free text
<u>SG1</u>		C	99	RFF-DTM
<u>RFF</u>	7	M	1	Reference
<u>DTM</u>	8	C	5	Date / time / period
<u>SG2</u>		C	99	NAD-FII-SG3-SG5
<u>NAD</u>	9	M	1	Name and address
<u>FII</u>	+ 10	C	5	Financial institution information
<u>SG3</u>		C	9999	RFF
<u>RFF</u>	11	M	1	Reference
<u>SG5</u>		C	5	CTA-COM
<u>CTA</u>	12	M	1	Contact information
<u>COM</u>	13	C	5	Communication contact
<u>SG6</u>		C	5	TAX-MOA
<u>TAX</u>	14	M	1	Duty / tax / fee details
<u>MOA</u>	+ 15	C	1	Monetary value
<u>SG7</u>		C	5	CUX-DTM
<u>CUX</u>	16	M	1	Currencies
<u>DTM</u>	17	C	5	Date / time / period
<u>SG8</u>		C	10	PAT-DTM-PCD-MOA
<u>PAT</u>	18	M	1	Payment terms basis
<u>DTM</u>	19	C	5	Date / time / period
<u>PCD</u>	20	C	1	Percentage details
<u>MOA</u>	21	C	1	Monetary value
<u>SG9</u>		C	10	TDT
<u>TDT</u>	22	M	1	Transport Detail
<u>SG12</u>		C	5	TOD-LOC

<u>TOD</u>	23	M	1	Delivery or Transport Terms
<u>LOC</u>	24	C	2	Place / Location Identification
<u>SG13</u>		C	1000	PAC
<u>PAC</u>	25	M	1	Packaging
<u>SG15</u>		C	9999	ALC-SG17-SG18-SG19-SG20-SG21
<u>ALC</u>	26	M	1	Allowances or charges
<u>SG17</u>		C	1	QTY
<u>QTY</u>	27	M	1	Quantity
<u>SG18</u>		C	1	PCD
<u>PCD</u>	28	M	1	Percentage details
<u>SG19</u>		C	2	MOA
<u>MOA</u>	29	M	1	Monetary value
<u>SG20</u>		C	1	RTE
<u>RTE</u>	30	M	1	Rate details
<u>SG21</u>		C	5	TAX-MOA
<u>TAX</u>	31	M	1	Duty / tax / fee details
<u>MOA</u>	32	C	1	Monetary value

5. ADMINISTRATION MODULE OF E-PROCUREMENT SYSTEM

Administrators Software consists of the following functional modules:

- Offers – Product Data,
- Dictionaries
- User administration
- Trade documents monitoring

In the left part of the screen an Administrator can access a menu with the list of modules. In order to run a chosen module one should click with one's mouse left button onto the icon, which represents the module one wants to access. In order to choose modules from the other parts of the system (by default after running Administrator has access to the icons of the first part of application) it is needed to click with your mouse button into a button labeled with the name of the application part one is interested in.

Function key shortcuts

Action	Key shortcut
Go to first record	CTRL + Page Up
Go to last record	CTRL + Page Down
Previous record	↑ (cursor key)
Next record	↓ (cursor key)
Next field	TAB, ENTER
Previous field	SHIFT + TAB
Add record	INS
Delete record	CTRL + DEL
Edit field	F2
Unroll value list	ALT + ↓
Search next value on the product list	CTRL + ENTER
Search previous value on the product list	CTRL + SHIFT + ENTER

Offers - Product Data

This module is intended to record, edit, delete, modify and automatic import of data of offers, which are put into the system via producers WWW sites. All forms are

built in a similar manner and consist of the elements which are the same type. Each form has a tool menu which allows to navigate the set of data presented by a net.



	Go to first record
	Previous record
	Next record
	Go to last record
	Add new record
	Delete record
	Edit current record
	Accept changes
	Cancel changes
	Refresh records
	Query mode
	Run entered Query ¹

User administration

This module enables an Administrator to follow user reports made via registration forms from WWW sites. In this point user data is verified and next an Administrator creates a user of the e-Procurement system (This is made easy by the button "Create user" with entitlement type "WWW" - access via WWW sites - in distinction of a user with entitled data base level access via *OracleClient* software) and gives him access rights for particular offers according to the schema of receiver group membership of particular producer. If this is an accidental request Administrator is entitled to delete the user data. In this module a password is given to the user, who then changes it in such a manner, that the Administrator is of no knowledge about the current access password of the system users.

Order status possible values:

- *Placed* – the order takes this status directly after defining the whole set of goods by the client and placing the order to delivery. At this point the deliverer may define particular items for this order.
- *Changed* – the order takes this status if only part of items of order is accepted by the deliverer. Then the client makes the decision (via WWW sites) or acknowledges (and wants to execute changed order) or discards the order.
- *Acknowledged / discarded* – if the given order is discarded (no matter if by the deliverer of placed order or by the client of changed order) the order ends its active state in the system. If the order is acknowledged it is being taken into next level – its execution.
- *Advice sent* – at this point Despatch Advice is sent from the deliverer to the client.
- *Executed* – the order has been realized and its active state in the system is ended.

Review and client order reporting

This module is used for widely understood navigation between the orders (previous module made navigation possible but only within a specified customer). There is a function which generates data from the form of the application into the Excel file format. Additionally administrative functions are also available.

Functions available for e-Procurement system Administrator**System user management**

Adding new system user

Company name <text(200)> obligatory

Data describing the participant. Range and data format according to EAN.UCC XML message specification.

Account expiration date <date> obligatory (results from license fee)

Given solution:

Month <number(2)> obligatory

Year <number(4)> obligatory

Date license fee payment <date> obligatory (paid in advance)

Number of Paged messages <number(10)> obligatory

Number of made messages <number(10)> obligatory – default value is zero

Modify system user data

Modify all previous data

Personal data reservation / disclosing

Entering information on new license fee payment made

Blocking / unblocking system user account

Defining the languages of the system

Adding new language

Modifying language description, entering a Picture with the flag representing the language

Review of all definitions present in the system

Adding new definition

Modification of existing definition

Review of translations of system definitions

Adding definition translation

Deleting definition translation

Modifying definition translation

Selecting default translation for definitions

Selecting default system language

System taxonomy definition

Adding new taxonomy (reference to the companies / products)

Modifying a taxonomy