# I. Description of the client terminal

#### 1. Common about the work with the system.

**System Requirements:** 

Internet Browser with 128-bit SSL support

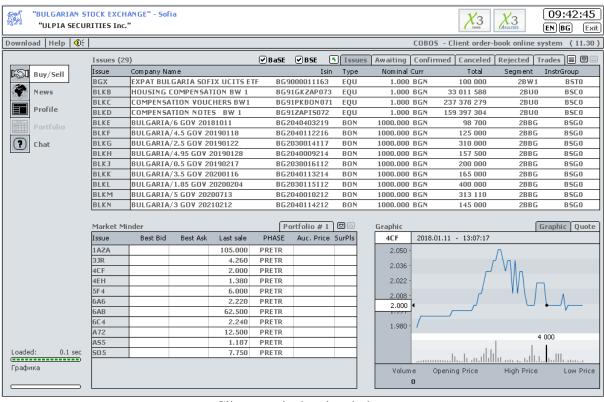
Adobe Flash Player version 8 or higher

Open TCP ports 3000, 443 and 843 (4000, 443 and 843 for the test system)

COBOS Screen Resolution: at least 1000x650 pixels

COBOS (Client Order-Book Online System) is an internet-based application for an authorized and secure access to the BSE Trading System in real time allowing BSE-members' clients to enter orders and to transact after receiving a confirmation from the broker. "Real time" means in this case that the COBOS applications are being updated at least every fifteen seconds.

According to the business-logic of COBOS there are three types of system users - the end client, the broker of the respective investment intermediary and the administrator of the investment intermediary. Every client receives an electronic client certificate allowing working with COBOS as a client (client certificate). He also concludes with the respective investment intermediary the standard contract for transactions with securities. The broker receives an electronic broker certificate, which identifies him in the BSE Trading System and allows him to "forward" the received clients' ask- or bid-orders. The system administrator is the person, who defines the access rights of the client and of the broker, and he is also responsible for generating and maintaining their certificates.



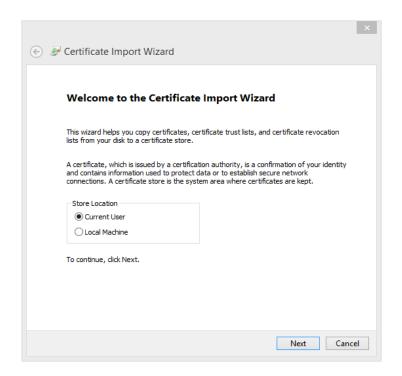
Client terminal main window

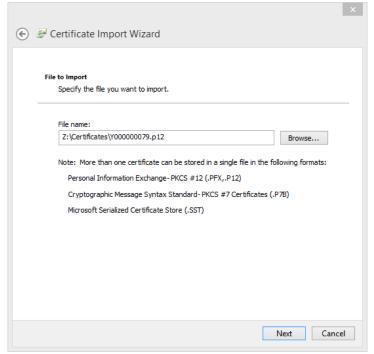
# 2. Initial start of the system by the client.

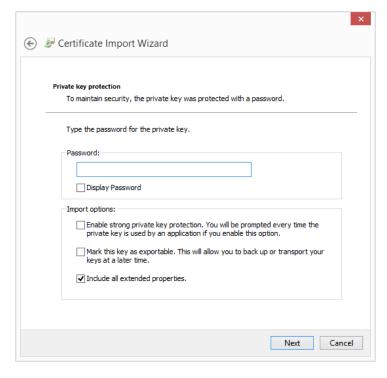
#### 2.1. Certificates

#### 2.1.1. Import of a client certificate

In order to use COBOS the client has to import his client certificate into his browser. To do so, he has to double-click the certificate or use the menu Tools-> Internet Options-> Content in MS Internet Explorer and then subsequently click on the buttons "Certificates..." and "Import...". When the "wizard" asks for the password, you have to leave that field empty. After passing through the "wizard"









You can check if the import has been successful in the menu Tools ->Internet Options ->Content by clicking on the button "Certificates..."

# 2.1.2. Using the certificate

When you enter the system, the browser asks a question about the certificate you are going to use.

A user (Bulgarian or foreign natural person or legal entity) might be a client of only one COBOS subscriber and respectively might have only one certificate to access the system.

# 2.2. User name and password

Besides choosing the used certificate the COBOS-user has to enter a user name and a password, where the user name is identical with the one in the certificate (client number at the Central depository) and cannot be changed.

#### 3. Structure of the menu

#### 3.1. "Buy-Sell" menu

# 3.1.1. List of the issues ("Issues")

The list of the issues is ordered on the basis of 2 criteria. The first is on the basis of the first letter of the respective issue in English (name), the second – on the basis of the first number or letter of code of the respective issue (code). Additional filters can be applied with respect to the exchange markets, e.g. Main market and BaSE, by selecting the appropriate check boxes. (Figure 4a).

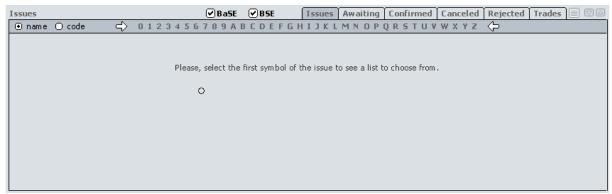


Figure 4a

For every issue the following information is available (fig. 4b):

- •BSE code
- •Company name when clicking on the respective name in English a separate browser window displays the current information derived from the exchange database
- •ISIN code
- •Instrument type
- Nominal value
- •Currency of quoting
- •Total number of trading lots for the particular issue
- •The segment according to the trading model; please notice that the code means the following: 2BB0 Continuous trading in connection with one intraday auction (Main market, bond segment)
- 1BU0 2 auctions without continuous trading (Main market, UCITS segment)
- 2BR0 Continuous trading in connection with one intraday auction (Main market, Premium segment)
- 2BU0 Continuous trading in connection with one intraday auction (Main market, Standard segment)
- 2BS0 Continuous trading in connection with one intraday auction (Main market, subscription rights segment)
- 2BIO Single auction (IPO market и Auction according to Art. 112b (7) of POSA)
- 2BW0- Continuous trading in connection with one intraday auction (Main market, structured products segment)
- 2BA0- Continuous trading in connection with one intraday auction (BaSE market)
- Security type; please notice that the code means the following: BSB0 bonds

BSC0 – Compensatory Instruments

BSE0 – equities

BSF0-UCITs

BSR0 - SPVs

BSS0 -subscription rights

BSW0 - warrants.

Issues (3	2)	<b>⊘</b> BaSE <b>⊘</b> BSE 5	Issues	Awaiting Co	onfirmed Canceled	Rejected 1	rades 🔳 🛛 🗅
Issue	Company Name	Isin	Туре	Nominal Cur	r Total	Segment	InstrGroup
4A0	A.V. BUILDINGS AD BW 1	BG1100015053	EQU	1.000 BG	N 1 800 000	1BU0	BSEO
6A8	ADVANCE EQUITY HLDG BW 1	BG1100033064	EQU	1.000 BG	iN 35 945 592	2BU0	BSEO
5AZ	ADVANCE INVEST AD REG. SHARES	BG1100004040	EQU	1.000 BG	N 2 050 000	1BU0	BSF0
6A6	ADVANCE TERRAFUND REIT SOFIA	BG1100025052	EQU	1.000 BG	N 44 056 058	2BU0	B5R0
A72	AGRIA GROUP HLDG BW 1	BG1100085072	EQU	1.000 BG	N 6 800 000	2BU0	BSE0
6A71	AGRIC. LAND OPPORT. FUND REIT	BG4000014085	EQU	1.000 BG	iN 14 044 300	3B50	B550
6A7	AGRICULTURAL LD OPP. BW 1	BG1100025060	EQU	1.000 BG	N 14 044 300	2BU0	BSRO
9E6A	AGRILEASING 06-10 FLR	BG2100006068	BON	437.500 EU	R 2 000	2BB0	B5B0
6AG	AGRO FINANCE REIT-SO.BW 1	BG1100039061	EQU	1.000 BG	N 16 137 954	2BU0	B5R0
4AN	AKB CORP.HLDG CO. BW 1,4	BG1100011987	EQU	1.400 BG	N 2 843 483	1BU0	BSE0
6A9	AKTCIONER FAV. HLDG BW 1	BG1100035986	EQU	1.000 BG	iN 2 356 923	2BU0	BSE0
5AX	AKTIV PROPERTIES BW 1	BG1100003059	EQU	1.000 BG	N 19 728 099	2BU0	B5R0
6AK	AKUMPLAST AD BW 7	BG11AKDOAT10	EQU	7.000 BG	iN 7 233	1BU0	BSEO

Figure 4b

For choosing issues with another first number/letter you can click on the pointer left to "issues" and choose the new first number/letter.

#### 3.1.2. Market-minder

The "Market minder" area allows the user to view

- •The best (highest) current bid and the total volume of the orders with highest price.
- •The best (lowest) current ask and the total volume of the orders with lowest price.
- •The price of the last deal and its volume for the selected issue (fig. 5).
- •Trading phase; notice, that the code means as follows:

ADD = Add

BETW = In Between Auction

CCALL= Closing Auction Call

DEL = Delete

ECALL = End-of-day Auction Call

ENDTR = End Of Trade

HALT = Halt

ICALL = Intra Day Auction Call

IFRZ = Intra Day Auction IPO Freeze

IIPO = Intra Day Auction IPO Call

OCALL = Opening Auction Call

OFRZ = Opening Auction IPO Freeze

OIPO = Opening Auction IPO Call

POSTR = Post Trading

PRETR = Pre Trading

START = Start

SUSP = Suspend

TRADE = Continuous Trading

VOLA V= Volatility Interruption

VOLA X= Extended Volatility Interruption

- •Indicative auction price
- •Indicative surplus on the buy side (B) and on the sell side (S) and volume of the surplus

Маркет Майндер Портфейл # 2							
Купува	Продава	Последна	ФАЗА	Цена Аук. :	SurPls		
		7.838	VOLA V	7.838			
		4.197	VOLA V	3.050	В		
		8.000	TRADE				
		11.270	TRADE				
		11.198	VOLA V	11.268	5		
		92.927	VOLA V	92.907	В		
0.982		0.984	TRADE				
42.199		42.445	TRADE				
		1.001	TRADE				
	Купува	Купува Продава	Купува Продава Последна   7.838 4.197   8.000 11.270   11.198 92.927   0.982 0.984   42.199 42.445	Купува Продава Последна ФАЗА   7.838 VOLA V   4.197 VOLA V   8.000 TRADE   11.270 TRADE   11.198 VOLA V   92.927 VOLA V   0.982 0.984 TRADE   42.199 42.445 TRADE	Купува Продава Последна ФАЗА Цена Аук.   7.838 VOLA V 7.838   4.197 VOLA V 3.050   8.000 TRADE   11.270 TRADE   11.198 VOLA V 11.268   92.927 VOLA V 92.907   0.982 0.984 TRADE   42.199 42.445 TRADE		

Figure 5

The area "Market minder" is conditionally divided in two portfolios ("Portfolio # 1" and "Portfolio # 2") and switching between them succeeds by means of the arrows in the top right and the bottom left part of the area. The currently active portfolio is in white. On Fig. 5 this is "Portfolio # 1". Every portfolio consists of 14 issues at most.

You can fill in the "Market minder" by dragging with the mouse the BSE code of the issue out of the area "Issues". When holding the mouse over the code of the respective issue, information about the company name in English is visualized. You can delete an issue by dragging its BSE code out of the area "Market Minder" and releasing the left button, when the pointer of the mouse turns into a recycle bin. When holding the mouse over the best bid or the best ask, information about the total volume of the orders with highest/lowest price is visualized. The green color of a certain price in the area "Market minder" means a lower bid or a higher ask, while the red color indicates the opposite. When holding the mouse over the last sale price, information about the volume of the trade is visualized.

#### 3.1.3. Statistics

When dragging the BSE code to the area "Statistics" you can view a chart with the last 70 transactions, but for a period not longer than 30 days. When holding the pointer of the mouse over the chart, you can see the price of the particular transaction, and in the upper part of the area the date, when the transaction took place (fig. 6).

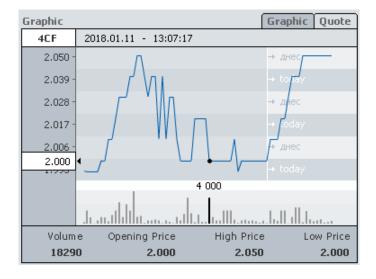


Figure 6

In the bottom part is provided information about the daily volume, the opening price, as well as about the highest and the lowest prices of the current trading session.

# **3.1.4. Quotes**

The "quotes" area (fig. 7) provides information (volume and price) about the current buy and sells order for the selected issue. The best 10 bid and ask limits, accumulated order volumes per limit and the number of orders per limit are displayed. Bids are displayed on the left side and asks – on the right. If a particular quote is painted in red, this means that it is entered by the current COBOS user.

Quote					Graphic (	Quote	
3JR ⟨⇒		SOPHARMA AD		BW 1			
		Units	Price	Price	Units		
3		1 666	4.260	4.270	5 782	2	
8		6 513	4.250	4.290	2 700	2	
2		1 200	4.240	4.300	8 915	3	
3		2 785	4.230	4.320	5 200	2	
2		284	4.220	4.330	2 180	1	
2		800	4.210	4.340	1 570	4	
11		6 643	4.200	4.350	101 000	2	
4		5 165	4.190	4.370	100	1	
1		180	4.180	4.400	200	1	
3		1 500	4.170	4.420	1 000	1	
V	olume	Opening Price		High Pri		Low Price	
694			4.270		70 -	4.270	

Figure 7

# 3.1.5. Entering orders to buy or sell by the client

In order to enter an order to buy or sell, you have to click with the left mouse button on the BSE code of the issue (notice that the issue has to be loaded in the "Market minder" in advance). A new window for input of a limited order opens upon the area "Statistics" (fig. 8a).

In the opened window you can choose, whether it is a buy- or a sell-order in the field "Action". When you choose buy order the field background becomes green, and when choosing sell order – red. If a buy order is to be entered then the check box below is visualized as "Margin trade". If marked, the order will be entered into the system as a margin trade order. In case of a sell order the check box changes to "Short sell" but it can be marked only of the instrument meets the normative requirements for short selling. If this check box is marked, then the field allowing the validity to be set is disabled, as the exchange rules provide that all short sell orders can be only good for the current day. "ExR" indicates orders from the following types: immediate-or-cancel (IOC) or fill-or-kill (FOK). By

default the field "ExR" is empty and indicates orders with a validity of the type "good-till-cancelled" (maximum validity of 90 days). "Date" allows entering orders only valid for the current exchange trading day or valid until a specified date (maximum validity of 90 days). In the field "Units" you should enter the number of the securities object of the order, and in "Price" - the security's price. The "TrR" field indicates the trading phase restriction applicable to the order. Its values can be as follows:

i)For instruments traded continuously:

- (1)Blank
- (2)OA (Opening auction)
- (3)CA (Closing auction)
- (4)AU (Auction only)
- ii)For instruments traded in two auctions:
  - (1)AU (Auction only)
  - (2)OA (Opening auction)

(3)CA (Closing auction)

iii)For instruments traded in one auction, this field is blank and disabled.

If the "TrR" is left blank, this means that the order is valid for all trading phases. The closest indicative prices (Max Up, Max Down), crossing which will initiate a volatility interruption, are showed in the bottom part of the window. These indicative prices are defined according the dynamic and static price ranges of the respective issues.

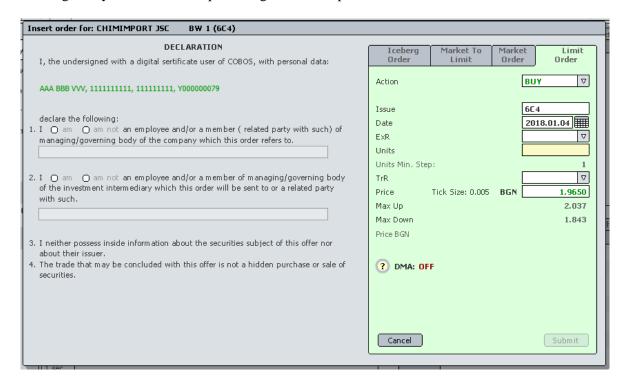


Figure 8a

On the left side of the window, a declaration required by the legislation, is visualized. The user should declare whether he or she is an insider, that he or she doesn't possess inside information, and that the trade that may be concluded is not a hidden purchase or sale of securities. In cases of sell orders, an additional declaration is displayed which is that the securities subject of the order are not blocked at the Central Depository.

The bottom right part of the window provides information whether the corresponding order will be automatically confirmed. The automatic confirmation functionality (DMA) can be activated and deactivated by the administrator at any moment. Upon deactivation all orders must be manually confirmed by a broker (the order is put in the "Awaiting section)". All orders sent outside of the normal trading session timeframe remain awaiting manual confirmation and can be confirmed by a broker after 09:00:00 on the current, respectively on the next business day. In other words, orders, which are automatically confirmed, are only those that concern instruments with the following state: PRETR, OCALL, TRADE, ICALL, CCALL, BETW, VOLA (excl. VOLA F) and POSTR.

Orders for instruments in the following states: ENDTR, START, HALT, VOLA F, SUSP, DELL and ADD are not automatically confirmed and remain awaiting confirmation by a broker.

Also, the automatic confirmation can be deactivated for market bid orders only. In that case all other orders will be automatically confirmed while market bid orders will be sent to the broker for manual confirmation.

If you click with the left mouse-button on "Market Order", the window looks like the one on fig. 8b and can be used to enter a market order.

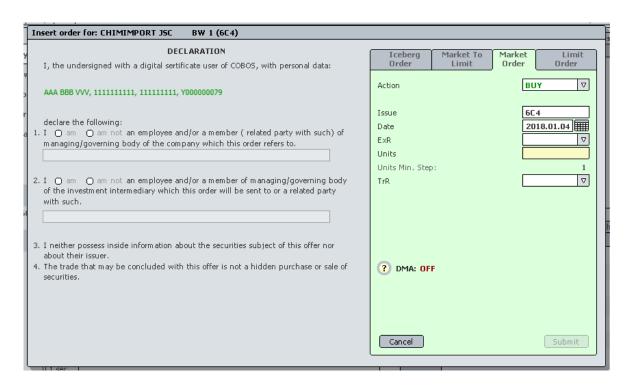


Figure 8b

For the market orders you have to enter their type (buy or sell), as well as the amount of the securities, object of the order. The price, which would be valid for the submitted market order is the best one available at the time of confirming the order, not at the time of its sending for confirmation by the broker. A trading phase restriction can also be entered in the "TrR" field.

Similar to the limit orders, the market orders can be sent for confirmation by clicking on the button "Submit", and canceled (not sent) by clicking on "Cancel". Clicking on "Cancel" also closes the window.

Market-to-limit order window looks the same as the market order window.

Clicking on the "Iceberg orders" a dialogue window shown on Fig. 8c gives the user an option to enter an iceberg order

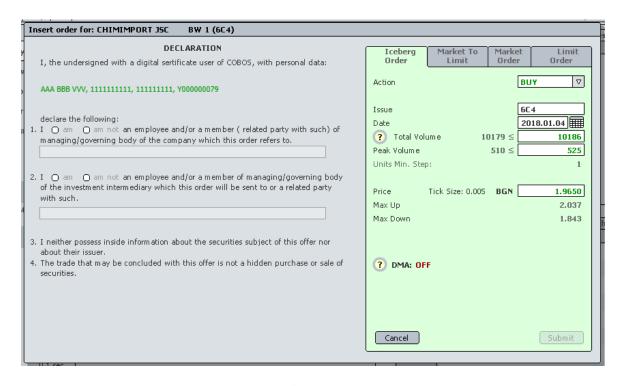


Figure 8c

Iceberg orders are limit orders, which are specified by an overall volume and by a peak volume and in which only the peak is visible in the trading system at any time.

The validity of the orders may be: good-till-cancelled, with a maximum validity of 360 (three hundred and sixty) calendar days; good-for-day and good-till-date, where the period may not exceed 360 (three hundred and sixty) calendar days

The minimum overall volume (the "Total Volume" field) of an iceberg order is 1,000 financial instruments and the minimum peak size (the "Peak Volume" field) is 10% of the overall volume of an iceberg order.

After execution of the unexecuted part of the peak volume, the system enters an order with the same price and a new peak until depletion of the overall volume. During auctions, iceberg orders participate with their total volume. Additional execution conditions and trading restrictions may not be assigned to iceberg orders.

If the total volume of an order (excluding market and market to limit buy orders) exceeds BGN 30, 000 the system requires an additional field to be filled indicating the source of the proceeds.

Irrespective of the order type, after clicking on the button "Submit", the order is being sent to the respective broker for confirmation, and if you click on "Cancel", the window closes, the order is not being sent.

After the order has been sent to the broker for confirmation, its parameters are viewed in the area "Awaiting" (fig. 9), where:

- •The symbol "#" indicates whether it is a buy- or a sell-order ("B" buy, "S" sell)
- •"Ticket" is the number of the order
- •"Issue" is the BSE number of the issue
- •"Time" is the enter (submit) time of the order to the broker
- •"Units" is the number of trading lots ordered
- •"Price" is the price of the order
- •"Leave" is its validity
- •"ExR" is the execution condition, if such
- •" TrR" is the trading phase restriction, if such

# •"Type" is the order type

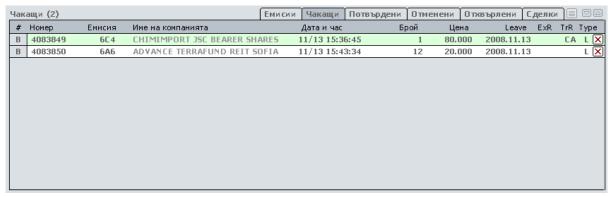


Figure 9

Short sell orders are painted in red and margin trade orders are painted in green.

## 3.1.6. Confirmation of the order by the broker

When receiving an order for confirmation, the broker can view its parameters on his broker terminal. If he confirms the order (i.e. enters it into the BSE trading system), it would be taken out of the list of awaiting orders and moved to the list of the confirmed ones (fig. 10).

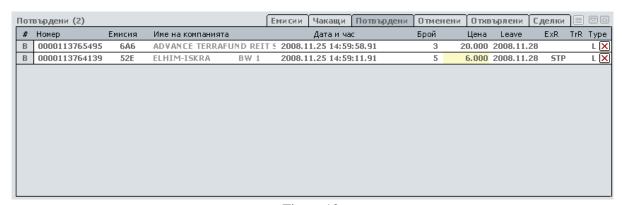


Figure 10

# 3.1.7. Cancellation of orders

When you click on the red cross-mark on the right side of a not-confirmed order, it will be automatically deleted from the list if awaiting orders, i.e. it will not be confirmed by the broker. Analogously, in the area "Confirmed", a confirmed order can be deleted from the list by clicking on the red cross-mark on the right side of the parameters. In this case it is necessary the broker to confirm the deleting of the order from the BSE trading system.

A particular order can be deleted not only by the client, but by the broker too, even if he has not confirmed it.

The BSE trading system can delete a buy- or sell-order too, even if it has been already confirmed by the broker. All canceled orders of the client, without respect to the reason of deleting, are viewed in the area "Canceled" (fig. 11), where besides the parameters of the order is provided information about the time of deleting ("Del. time") and the reasons for deleting ("Reason"), where:

- •"B" (Broker) the order was deleted by the broker
- •"S" (System) the order was deleted by the BSE trading system
- •"T" (Trade) the order was deleted due to a client's transaction

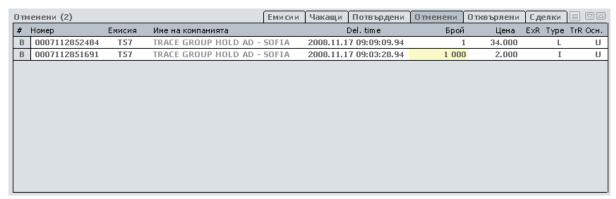


Figure 11

# 3.1.8. List of the orders rejected by the system

If by some reasons the broker's order is being rejected by the system during the confirmation, its parameters will be viewed in the area "Rejected" (fig. 12).



Figure 12

When you hold the mouse over the BSE code, you can also see the reason why the order was rejected, e.g. the confirmation by the broker was not made during the allowed time for order entering.

By clicking on the "sign" (in the menu "Edit"), you can add the order again to the list of the awaiting ones ("Awaiting"). By clicking on the "delete" (in the menu "Edit"), you can completely delete the order.

#### 3.1.9. List of the client's transactions.

If the confirmed order of the client becomes a transaction, information about it is provided in the area "Trades" (fig. 13), where:

- •The sign "#" indicates whether it was a buy- or a sell-transaction ("B" for buy, "S" for sell)
- •"Ticket" is the number of the order
- •"Time" is the time of making the transaction
- •"Issue" is the BSE code of the issue
- "Units" is the amount of the trading lots, which are object of the transaction
- •"Price" is the transaction price
- •"Curr." is the transaction currency
- •"Volume" is the total value of the transaction



Figure 13

# 3.2. "News" menu

The "News" (fig. 14) area displays information about the current news published in the daily bulletin if the exchange, as well as the values of the official stock index.

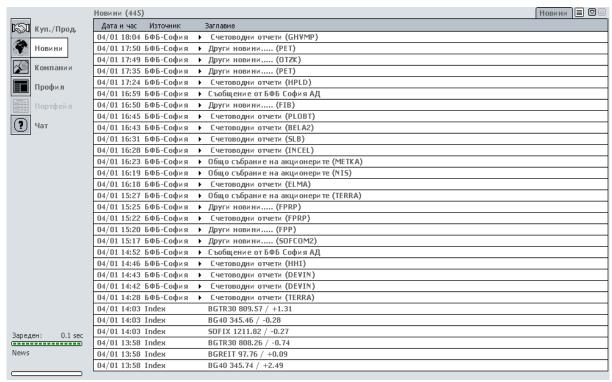


Figure 14

# 3.3. "Profile" menu

The "profile" area (fig. 17) displays information from the electronic certificate of the user of COBOS. In addition, users can change their existing passwords that they use to log in to the system.

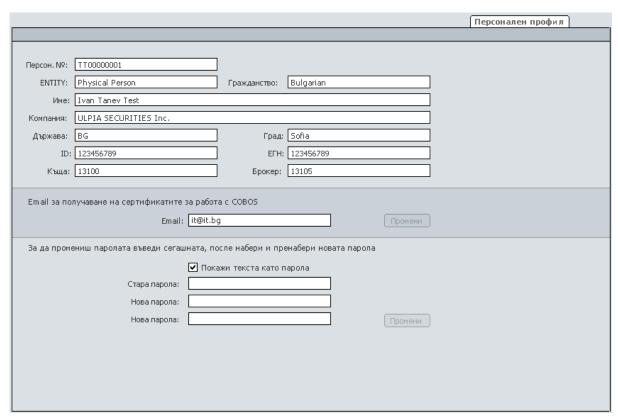
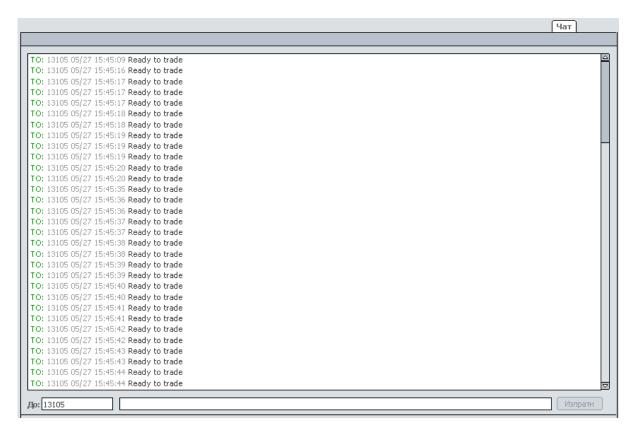


Figure 17

# 3.4. "Chat"

The system provides a chat communication capability between the client and his or her broker (fig. 18). Its functionality is the same as of a typical chat application.



**4. Going out of the system**The exit from COBOS can be accomplished by clicking on the button "Exit" in the upper right part of the system's basic window.