

PN-ABX-548

FINAL REPORT
"Developing the Consensus Model"
Contract No. EUR-0014-I-31-1057-00
Delivery Order 31

Barents Group LLC
KPMG Peat Marwick LLP
September 30, 1995

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OBJECTIVES

The primary objective for this task order was to develop a consensus among the Polish brokerage community about the need for, and potential future design of, a self-regulated over-the-counter (OTC) market for Poland.

ACCOMPLISHMENTS

Barents established a very effective working relationship with the Brokerage House Association (BHA), an organization which represents the majority of broker/dealers in Poland. While working with the BHA, Barents has developed the desired consensus about the future OTC market. Highlights of Barents-BHA cooperation are as follows:

- On April 25-26, 1995, Barents Group gave a detailed presentation on requirements for a self-regulated over-the-counter market to the First BHA Conference in Pultusk, Poland. This presentation discussed general principles of self-regulation, proposed an SRO organizational and governance structure, and described how an OTC trading system would potentially work. As a result of this presentation, the BHA voted to proceed with the development of an SRO and an OTC market for Poland and to accept funding from USAID for this purpose.
- Throughout May, 1995, Barents Group worked with an interim Strategic Group that had a thirty day mandate to develop further the ideas set forth on April 26. As a result of this effort, Barents drafted a document, “Proposed Structure and Development of the OTC Market in Poland,” which presented Barents’ model for the SRO and OTC market in Poland. In addition, Barents worked with the Financial Subcommittee of the interim Strategic Group to develop financial projections for the on-going operations of the SRO and OTC Operating Entity.
- At the Annual Member Meeting of the BHA on May 31, 1995, Barents facilitated the BHA’s passing of a resolution which approved the “Proposed Structure and Development of the OTC Market.” BHA members also accepted the financial projections. Further, a permanent elected Strategic Group was assigned to work with Barents on further development of the project.
- Subsequent to the May 31 meeting, Barents team members had regular meetings with the Strategic Group and its various subcommittees. These meetings furthered progress on key issues such as the legal structure for the SRO and the design of the future trading system. Documents produced included a draft charter for the OTC Operating Entity and draft trading rules.

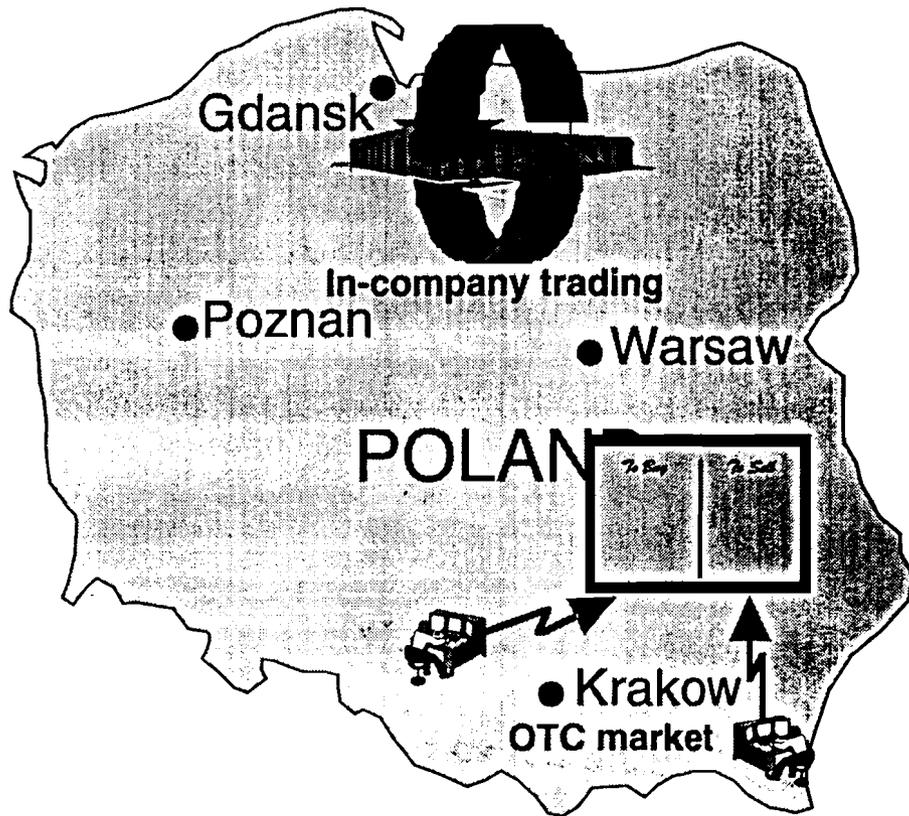
Reports delivered to USAID during this time period include:

- “Requirements for In-Company and OTC Trading” (first deliverable required under the task order)
- “Proposed Structure and Development of the OTC Market”
- “Polish OTC Trading System and SRO Draft Financial Projections” (second deliverable required under the task order)
- “Work Plan for the Continuation of SRO and OTC Development” (third deliverable required under the task order)

Barents Group staff who worked on the project include: K. Richard B. Niehoff, Roman Lewszyk, Krystyna Boron, and Joe Oliver.

-

A presentation to



EDM

**The Brokerage Houses'
Association**

BARENTS
GROUP • LLC

Requirements for in-company and OTC trading

A presentation to



ZDM
The Brokerage Houses'
Association

BARENTS
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Requirements for in-company and OTC trading

This presentation consists of the views of the Barents project team on the mechanics of an in-company trading system for the Over-the-Counter (OTC) market for Poland.

The views and ideas in this presentation are the views of the project team based on our experience in the United States and in our work in developing markets in other countries.

A presentation on...



<i>Issue</i>	<i>Affects</i>	<i>Page</i>
...organization and governance	ZDM	3
...the in-company market	MPP	11
...the OTC market	MPP	28
...how trading can work	ZDM/Barents	39
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...project tasks and timetable	ZDM/Barents	48
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In this presentation we will begin by presenting our notion for the organization and structure of the OTC market. We will present a very preliminary view on the financing and ownership of the market. Finally, we will present a preliminary project plan and suggest how we think we should get started.

The organization and governance of...

...the OTC market



The SRO

Structure of authority

Securities and issuers

Brokerage functions

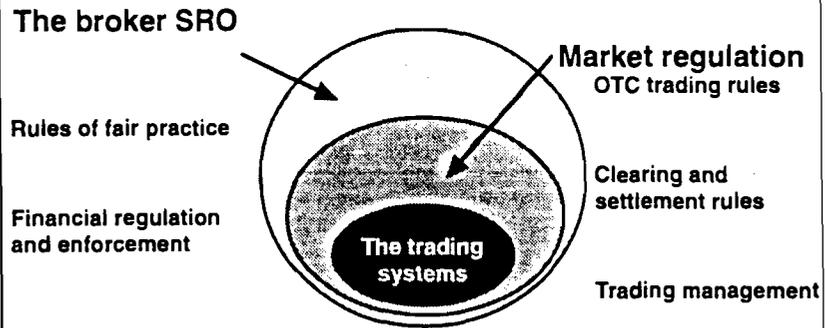
Compliance and surveillance

Related institutions

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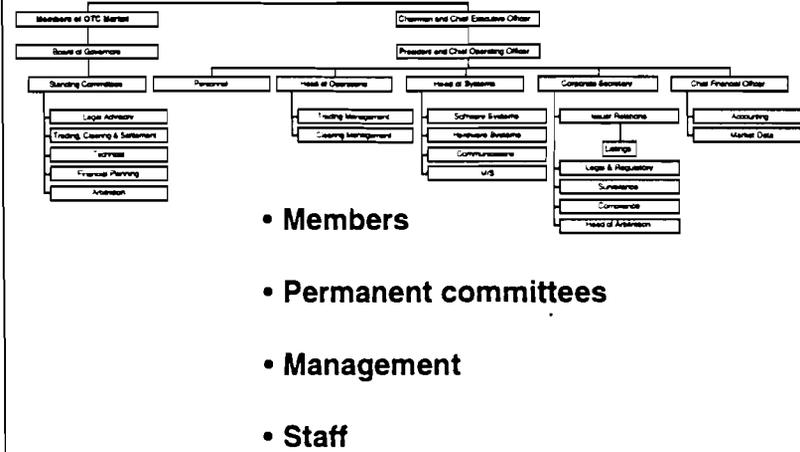
First we will consider the organization and governance of the OTC market. Since in-company trading will be conducted within a single brokerage house, these issues do not apply to the in-company market.

There are two aspects of regulation



Other markets have found the need for an organization to regulate and control trading. Brokers usually prefer to regulate themselves rather than have the government regulate them.

OTC structure of authority



The OTC market is owned and controlled by the members of the market. Member-ownership allows brokerage firms to influence the development of the market and suggest improvements to the regulatory framework of the OTC market. Members exercise their control through a board of governors elected from among the members and through a chairman who is elected from the members and serves in the role as chief executive officer.

The members are actively involved in the management of the OTC market through permanent committees charged with the management of different functions within the market.

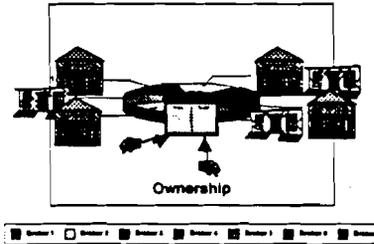
The day-to-day management of the market is the responsibility of the President, who serves as chief operating officer. The President has a number of department heads who report directly to him or her. Each of the department heads has responsibility for a number of operating functions.

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Market ownership...

...is equal among participants

- Owner/participants must subscribe
- Two year "safe harbor"
- Clearing participation separate
- Each participant "category" has board seat



Based on our experience in other markets, the OTC market in Poland should be equally owned by all members. The cost of ownership will be a pro-rata share of the cost of market development, less any initial contributions from USAID or other funding agencies.

All sectors of the brokerage community should be represented in the OTC market management. One method for providing this assurance is to reserve board seats for representatives of the groups within the brokerage community.

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OTC securities and issuers



- Equities and bonds
- Derivatives in time
- Issuers pay costs of listing
- Annual filing fees

While the OTC market will initially be comprised of equity securities only, we anticipate that the OTC market will represent a complete capital market for firms that choose to use it. We therefore anticipate that the market may in time expand to encompass additional security types (such as bonds and derivatives) as the participants and firms demand these added investment vehicles.

Listing on the OTC market will cause costs for listing and periodic review of financial statements. The market should have the right to levy charges against listed companies to help cover the direct costs of managing the listing process as well as the indirect costs of regulating the market, which will benefit the listed companies.

OTC brokerage functions



- **Broker participants**

- Bring orders
- Arrange settlement

- **Market makers**

- Establish prices
- Manage orders
- Provide liquidity
- Report trades
- Clears trades



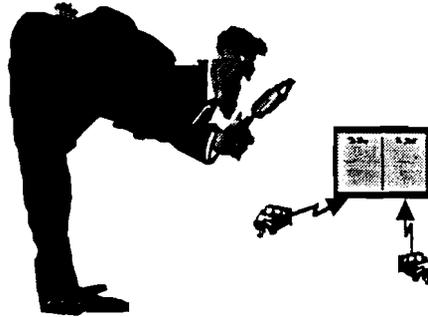
We anticipate two classes of broker participants: brokers and market makers. Brokers only bring customers' orders to the market and market makers both bring orders to the market and also perform a number of market management functions.

Market makers would have responsibility to help establish prices for the securities in which they make markets. This would include both setting a trading range at the beginning of each trading day, and provision for re-starting a security's trading after a trading halt for any reason.

Market making is a skill that is learned. Therefore, we believe the regulations that control the OTC market should permit a learning period during which the rules for, and expectations of market makers would increase.

Compliance and surveillance

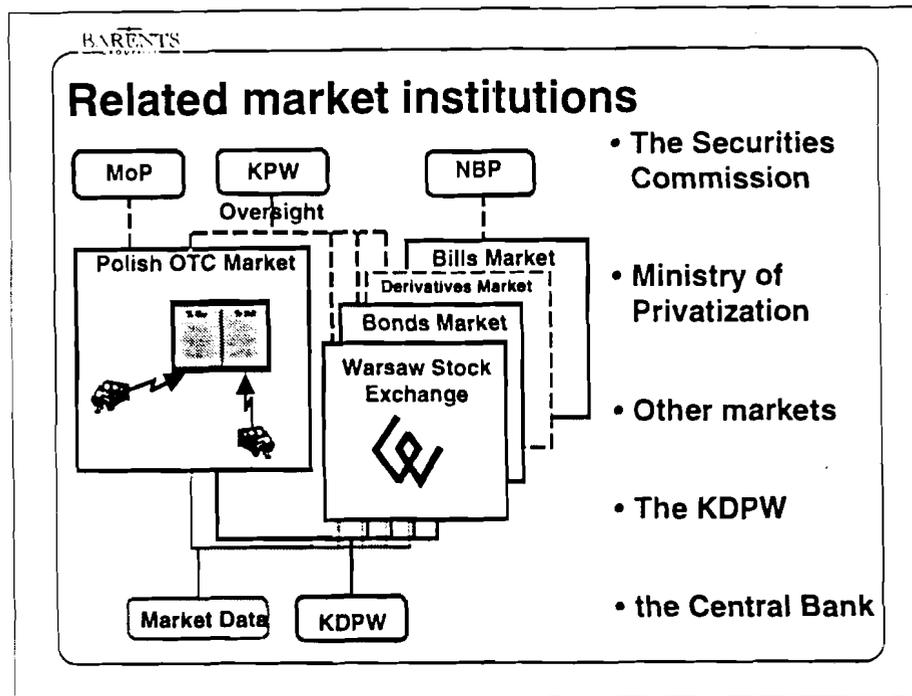
- Market makers
- Brokers
- Listed companies
- The trading process



The OTC market will need to manage its members, issuers and trading. The SRO will need to assure that the members comply with necessary financial strength requirements, the trading is transparent, and the rules of trading are fair and efficient.

The market must assure that listed companies provide all important information that can affect trading and investment decisions in a timely fashion and without preference to any group within the market. Information reporting requirements are determined by the laws of Poland as administered by the Ministry of Finance and the Securities Commission. It is possible that the OTC SRO may elect to modify or expand the legislative mandate to strengthen the market and encourage investor participation.

The market must monitor trading on a continuous basis to be sure that trading is both fair and efficient.



The OTC market is but one market within the Polish economy. It must operate under the rules and oversight of the legal authorities in Poland and must cooperate with the other markets where it is in the interest of the economy.

A presentation of...

...the in-company trading market



The functions

The components

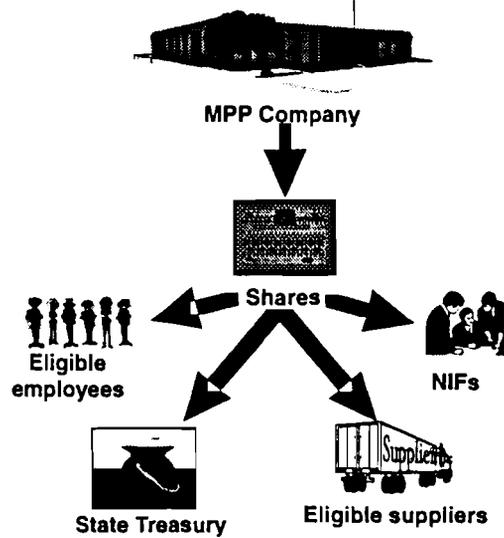
How trading can work

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CREDITALL

This presentation will describe the functions that are required for in-company trading. We will describe the components of the market that must be provided to accommodate trading. We will describe how trading can actually work. We will describe both an automated system that will take some time to develop and a manual that can be made to work, using the same rules as the long-run model using the existing telephone network.

Initial issue

- A list of those eligible to trade
- A registry of ownership
- Share distribution

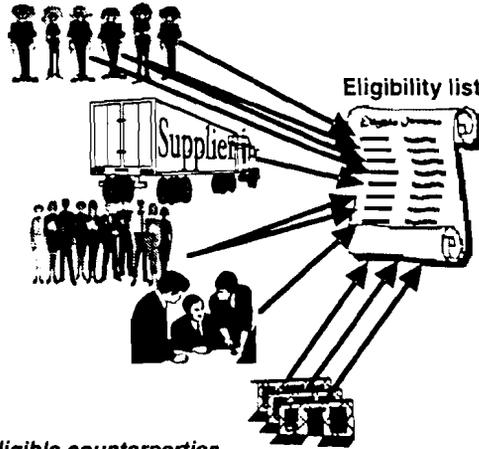


The first task in establishing an in-company market will be the distribution of issues from the companies. This will involve three major tasks. A list of those eligible to trade in the in-company market must be prepared. A registry must be created for owners, and the shares must be issued and distributed.

Create a list...

...of eligible counterparties

- Eligible employees
- Eligible suppliers
- Current employees
- NIFs
- Other brokers*



**Acting as agent for eligible counterparties*

The broker must create an “official list” of the entities and individuals who can legitimately trade in the in-company market. Once the list is created, it must be maintained as new employees join the company or as others leave.

Some eligible counterparties — particularly the NIFs — will not want to have an account with every brokerage firm that manages an in-company market in which they own securities. A solution we recommend would be for brokers to maintain reciprocal accounts with other brokers. Consider how this might work:

Suppose a company, XYZ, has chosen BRE to manage its in-company trading market. If a customer of Penetrator is an eligible counterparty of XYZ, Penetrator’s customer might not want to have two brokerage accounts. Therefore, Penetrator could be listed as an *eligible counterparty* on the list at BRE, as an agent for its customer. Any trades by Penetrator’s customer(s) would be recorded in Penetrator’s name on the books at BRE.

Develop a registry of ownership...



Registry

Manual

...either manual or automated

- Not KDPW eligible

- Broker manages both



Automated

- Physical registry

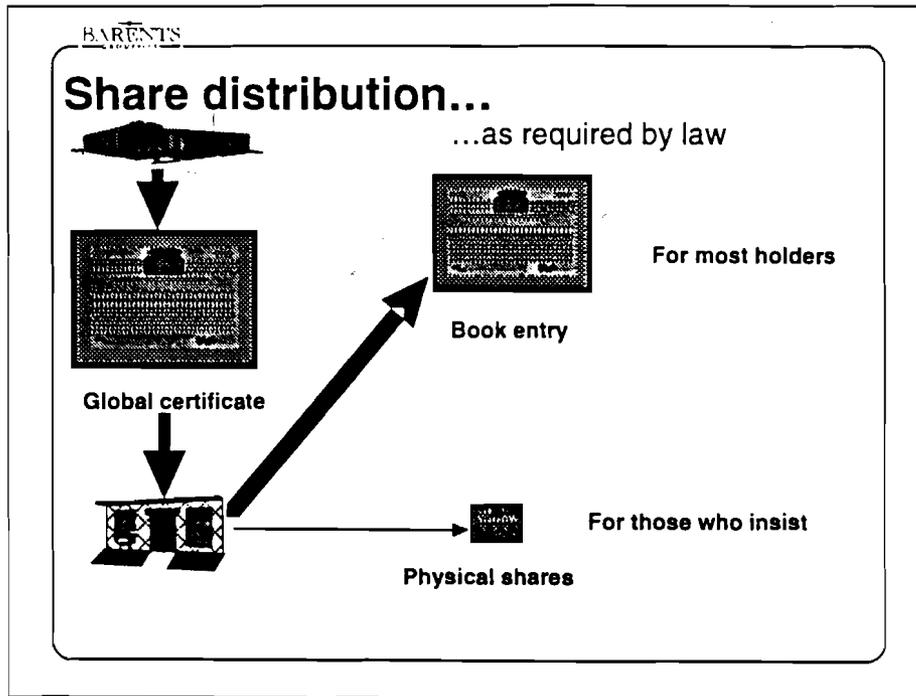
- Global certificates

- Required by law

Securities traded in-company are not "publically traded" as defined by the securities laws. Therefore they are not eligible for the National Securities Depository (KDPW.)

The majority of holders will be recorded through accounts at the brokerage firm managing in-company trading. We anticipate some of those eligible to trade may have accounts with other brokerage houses. For these individuals, the other brokerage house would maintain an account with the managing broker.

Most ownership will occur in book-entry form using the managing broker as a depository. In this case, the company will issue a global certificate to the managing broker who will then make entries in the registry of physical share certificates or open accounts for all of the employees and all other initial owners. Subsequent transfers would occur by bookkeeping entry, except where physical shares are issued.



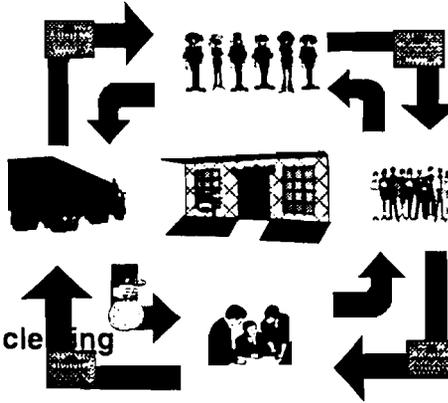
The broker must receive a master or global certificate from the company and issue shares in the prescribed amounts to each holder.

At this point, secondary trading can begin.

Secondary trading...

...has six main components

- Order routing
- Order processing
- Bid and offer display
- Execution
- Trade notification and clearing
- Settlement



Based on experience we have had in other markets, we expect secondary trading to have three distinct phases.

In the initial phase, just after trading takes place, there will be a flurry of activity, primarily selling in this instance, as those who receive shares and want cash sell their shares to anyone who is willing to buy. This period should be relatively short and the price of shares should be expected to drop sharply during this period.

The second extended period of several months should see relatively infrequent trades. After the price falls, some owners will want to wait for better prices, but potential buyers will be frightened to act. During this period, we need to develop mechanisms for creating liquidity. We will discuss possible techniques for generating volume in future presentations.

Finally, we expect more active trading to begin, as investors become more comfortable with the market and as the economy improves, making investment more attractive.

Whatever the exact pattern, in-company trading will need to provide the six components described above if it is to operate successfully.

Order routing is an issue...

...if the broker trades from his office

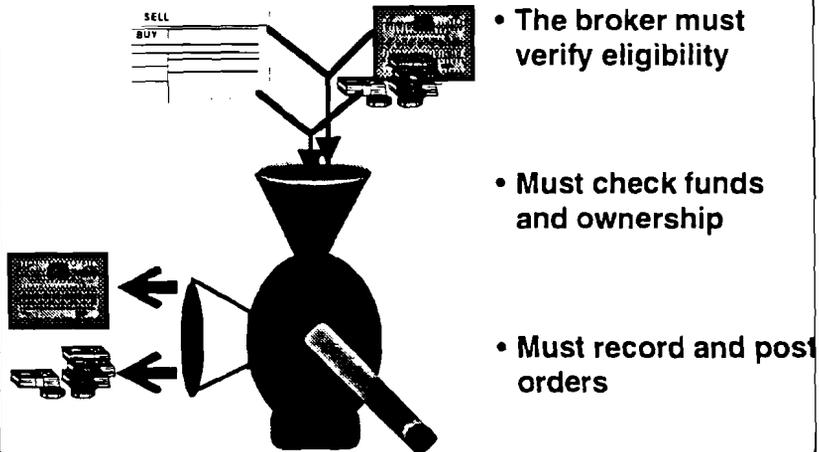
- Electronic transmission
- FAX or physical transfer



Orders must be routed from a company to the broker's office unless the broker travels to the company.

Order processing

Customer orders must be verified and logged



When a customer order is received to buy or sell, the broker managing the in-company market must verify and log the order. Verification means determining if the customer is a legitimate counterparty. That is that the customer is on the eligible list.

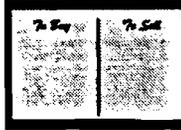
For valid orders, the broker must verify that the buyer has funds and the seller has securities form that can be traded.

Finally, the order details must be recorded and displayed to the market. Once a trade is effected the orders that comprise it must be removed from the display and removed from the file of open orders.

Bid/offer display...

...to employees and eligible counterparties

- Counterparty bids & offers

*Manual lists*

- Transaction prices

- Dealer and market maker quotes

*Electronic displays*

As with the OTC market a Central Table of Offers (CTO) will be necessary for presenting the status of the market and for advertising buying and selling interests. We recommend that bids and offers from participants be posted. We believe that the identification of the person or firm making a bid or offer be kept confidential, but the aggregate number of shares at each price be recorded and the number of orders at each price also be made available.

When a trade is completed, the price of the trade and the number of shares involved should be recorded and made public. Historical information on these trades should be maintained and published from time-to-time.

Execution of transactions



- “Physical” delivery
- Bookkeeping delivery

In-company trading constitutes “non-public trading” under the securities laws.

Trading can take place among those “eligible counterparties mentioned above. We hope most trading will occur as part of the bookkeeping-entry, in-house market, but as we have described we must allow for trading in physical shares.

Trade notification and clearing...

...are different from public markets

- Details are confirmed by both

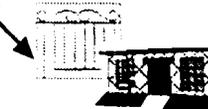


- Errors are corrected



Errors

- Disputes must be resolved



Clearing



Disputes

Once an execution takes place, the employees and other counterparties must be notified. Moreover, since the employees may be acting on their own behalf, they must verify the details of the trade. Since the employees are not trained brokers, the broker managing the market will have to provide both training and continuing assistance in this process.

Errors will occur as a natural consequence of trading. Moreover, there will be instances when people who are not used to trading will make trades when they do not have the money or shares. Also, people will make trades and then try to ignore the trades if the price moves against them before settlement. The broker managing the market must establish both a method for correcting the errors in the records of the market, and a method for resolving disputes that may ensue from these problems.

The in-company trading rules must provide mechanisms for handling these problems. Of equal importance, brokers running the market must develop training courses and create instructional materials that inform customers of the privileges and responsibilities of the in-company trading market.

Settlement instructions...

...determine the settlement details.

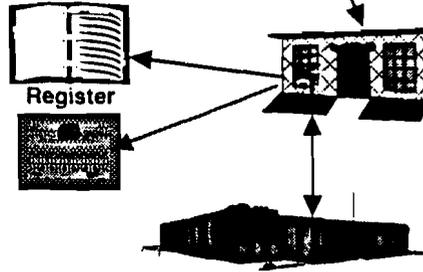
- **Money transfer**

— From buyer to seller



- **Securities ownership**

— From seller to buyer



The trade is settled when ownership is exchanged and payment is made. The broker must establish the location and procedures for cash deposits and withdrawals, as well as post-trade reporting to the parties.

Consider possible situations...

...for MPP companies



A small company with only one location

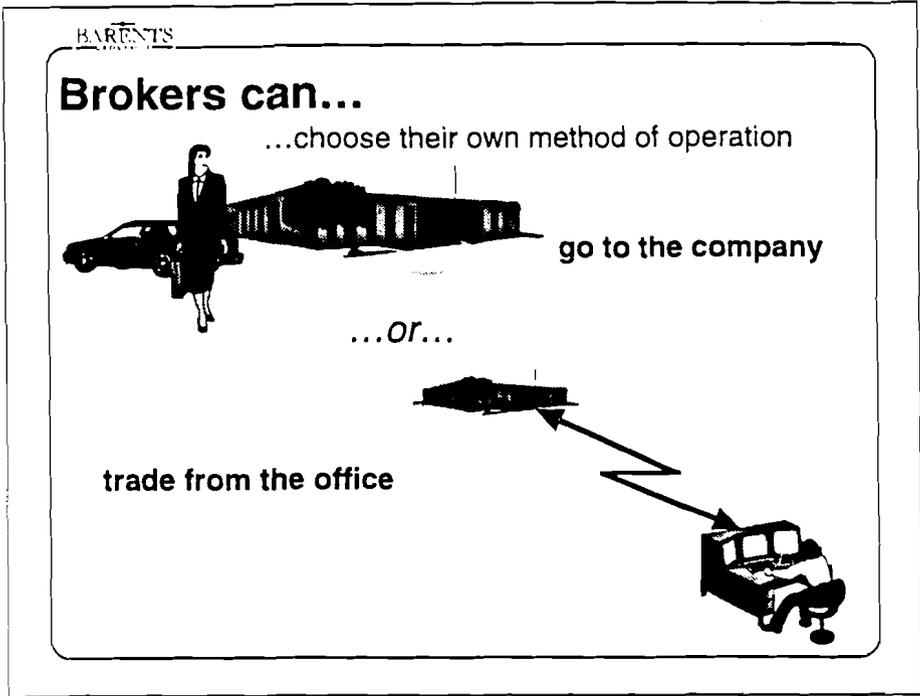
...Or...

A large company — several locations



It is most common to think of MPP companies as having a single location. Some companies may have multiple sites, and it is important to consider the process for exposing orders from one location to possible investors in the other sites.

Even a company with a single location may have a very large building or several buildings at the site. The market must develop a way for these employees to view the company's CTO and to enter orders. The process should be created in such a way that it does not interrupt the business of the company.

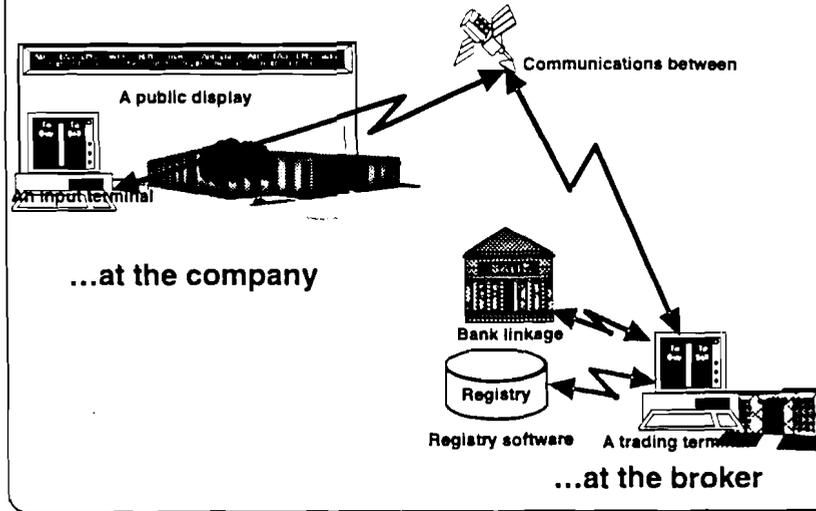


If the MPP company has multiple locations or a very large facility with many employees, it will be more convenient for the broker to manage the market from a single location. Moreover, if the broker has many companies to manage, a centralized location to manage trading will be most efficient.

For very small companies and for brokers who have few markets to manage, traveling to the company to manage the market (perhaps in a cafeteria or conference room) may be the best way to operate the market.

The automated trading system...

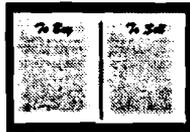
...will have several elements



In-company trading can have similar rules and procedures. The in-company market can serve as a training ground both for companies as they move to the OTC market, and for brokers.

In the short run trading can start... ...with existing "systems"

- FAX for orders
- Bulletin board for prices
- Manual registry



There is no reason for the market to wait for the development of an automated system. The rules and procedures we are recommending would work perfectly well with a manual system using FAXs for order routing, a chalk board for the CTO and a physical registry.

A presentation on...

...requirements for the OTC market



The OTC trading entity...

The trading system

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POLSKA

This portion of the presentation describes the actual mechanical aspects of the OTC market. We will begin by representing the elements of the OTC trading entity, and we will define the infrastructure needed to support these elements.

The OTC trading entity...

...is comprised of four separate systems

- The trading system



- Management information systems



- Market data systems



- Telecommunications network



The OTC trading entity must be comprised of a trading system to manage trades, a management information system to support the market, market data system and a system for clearing and settling trades.

The trading system

...and providing execution facilities

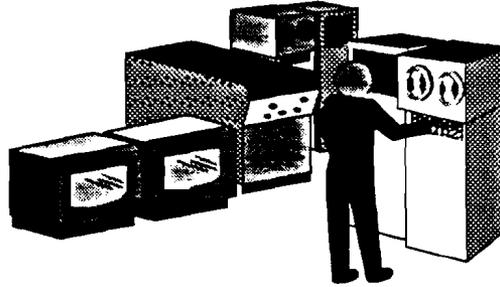


The trading system must provide the facility to execute trades. Initially, this "system" can involve manual procedures and existing equipment such as bulletin boards, FAX machines and telephones. We believe automated support for the OTC market will be very important, but it is not necessary in the early stages provided rules of trading and fair practice are developed and enforced.

Management information systems...

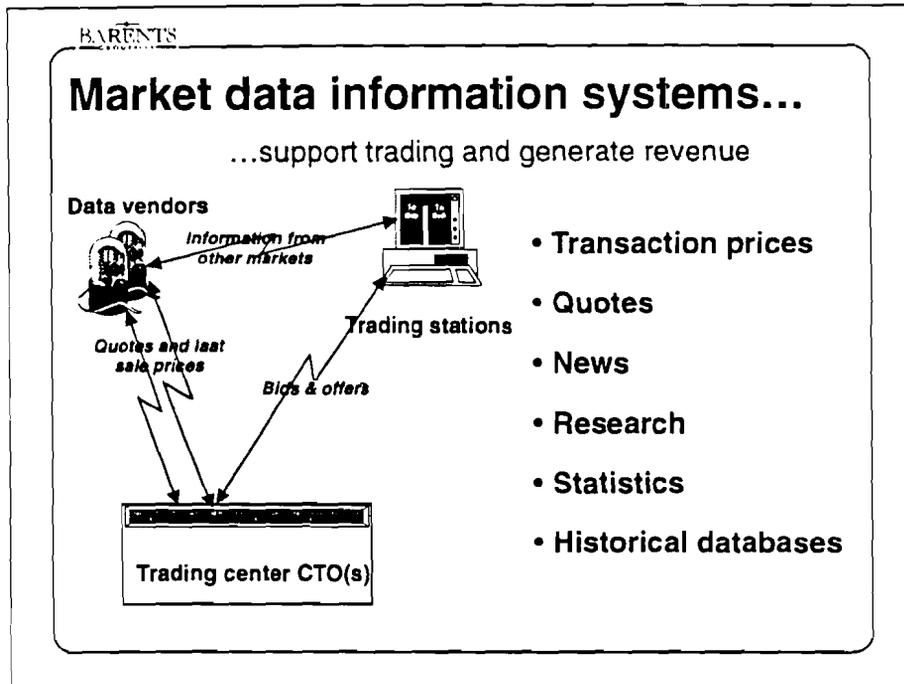
...will be needed to support the market

- Market support
- Surveillance
- Accounting



There are several processing activities that will be required by the OTC market in addition to those required by the trading system. The OTC market must have the systems and structures to support these additional services.

We must provide for the collection of statistics on the market, for the analysis of trading information needed to look for unusual trading activities, and we must provide for the accounting for the operations of the OTC entity.



One of the important by-products of trading is market data — the price, size, and related trading information. When this information is disseminated into the marketplace, other traders know what is happening, and the data may often spur other buyers and sellers to place orders.

Market data systems must collect information from market makers and brokers as they input both quotes and trade reports. This information must be analyzed for accuracy and processed for distribution both within the brokerage community to those who are trading in the market, and to vendors and news organizations for resale to the larger Polish and world investment market. (E.g., Reuters, Bloomberg and Telerate.)

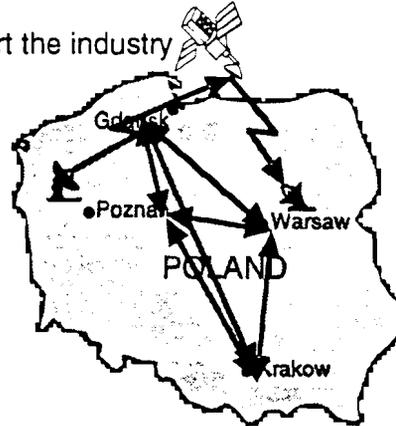
Delivery of quotes and trading information creates a complex networking problem of collection and distribution. Trading in OTC securities will rapidly become continuous. Broadcast updates of both securities' trade prices and new quotes will have to be sent to every terminal viewing the data as the changes occur.

In addition to market data, trading terminals must provide traders with information from other sources. These additional sources include news, historical data analysis, access to internal information sources unique to each firm, and order routing networks. Information for many vendors comes through different networks and is consolidated at the terminal or the terminal controller.

Telecommunications network

...will support the industry

- **Data communications**
 - Order routing
 - Market data
 - Clearing and settlement instructions
- **Voice communications**
 - Intra-firm
 - Inter-firm



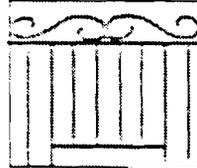
Several different functions need the capacity to communicate both voice and data throughout Poland.

Most OTC markets use extensive voice connections in addition to computer communications links. We must evaluate the final structure of the market and determine the scope and availability of high-quality voice links among the trading centers.

OTC...

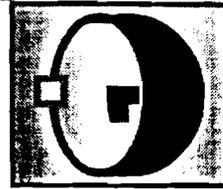
... is different from WSE clearing

...clearing ...



...and...

...settlement...

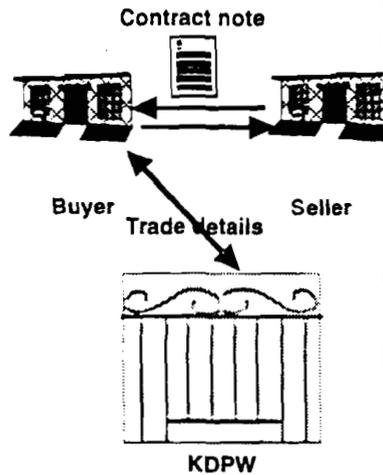


Clearing OTC transactions will be different from clearing for the other markets. Trading among dealers will involve a confirmation/affirmation process that is different from trading on the WSE.

OTC clearing...

...requires broker-to-broker confirmation

- Compare buy and sell details
- Seller sends contract note to buyer
- Buyer affirms or jointly correct errors
- Buyer sends details to KDPW



After the trade is executed, the two parties responsible for the trade must ensure that the details are in agreement, and they must arrange for payment. For the majority of marketplaces, a clearing corporation collects the details of all trades in the marketplace. Corresponding trade reports are then matched, and any discrepancies are returned to both the buyer and the seller for resolution.

Settlement instructions

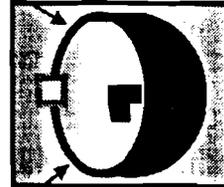
- **Money transfer**

- From buyer to seller



- **Securities ownership**

- From seller to buyer



The trade is settled when ownership is exchanged and payment is made.

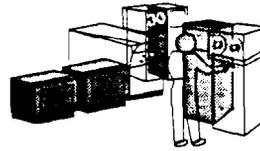
Underlying these processes...

...is an infrastructure

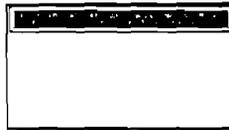
- Communications



- Processing



- Order Display



Our project will be working to create the needed support services — communications, computer support and training — needed to create an efficient OTC and in-company market even as trading starts. Hopefully this infrastructure will be in place shortly, but trading need not wait for the systems to be completed.

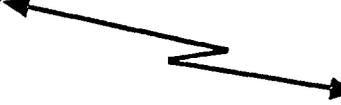
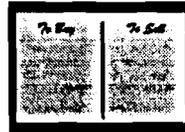
In the short run...

...trading can start with existing "systems"

- FAX for orders



- Bullitenboard for prices



The rules we have described here can work in a market where the CTO is a chalk board and orders are routed by phone and FAX. We believe the development of the market should not wait for the development of computer systems. Indeed, valuable lessons can be learned from manual trading that will help to shape the design of the automated system.

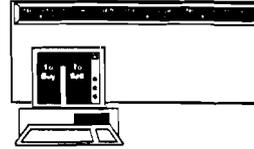
We propose a method of trading...

...that can evolve from...

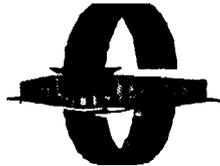


...manual trading...

...to...

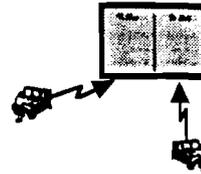


...fully automated trading...



...and from
in-company trading...

...to...



...public OTC
trading...

We believe, as we have stated before, that marketmaking will evolve. It will be important for the marketmaking process to evolve from one of limited responsibility for a marketmaker as trading starts, to one involving more stringent requirements as the market matures.

How trading can work —

the Barents view



Indicative prices

Customer orders

Trade reporting

Market maker participation

BARENTS
POLSKA

In this section we will describe how the Barents team sees trading working. This method works for both in-company trading and for the OTC market. We show the orders and trade reports occurring on a chalk board to emphasize that the ideas will work even in a manual trading environment.

The broker's indicative price...

...sets the expected trading range

<i>To Buy</i>		<i>To Sell</i>		<i>Trades</i>
<i>quantity</i>	<i>price</i>	<i>price</i>	<i>quantity</i>	
		<i>24 15.00</i>		
	<i>24 10.00</i>			

We believe the markets need to open with a price at which the broker expects prices to trade. In all markets, opening prices differ from the close for the previous trading period if no information occurs in between to alter the price. In thinly-traded markets, there are often large price differences between one trade and the next.

For all markets, and particularly those in which trading is infrequent, the dealer has the best idea of the probable trading range. At least initially, we expect these prices to be indicative. That is, the price where the broker feels trading is likely to take place given what has recently happened in trading and any information the broker may have on events and conditions that may affect trading.

We expect the prices to start each trading session to be relatively wide. As more information and orders begin to flow into the market, the broker should narrow the indicative price range until an effective trading range is established. Whatever the trading mechanism, a broker's indicative prices should be easily identifiable because they are the prices without any associated volume.

Customers' orders...

...are firm

<i>To Buy</i>		<i>To Sell</i>		<i>Trades</i>
<i>quantity</i>	<i>price</i>	<i>price</i>	<i>quantity</i>	
		\$15.00		
		\$14.00	5	
		\$13.00	100	
200	\$12.50			
50	\$11.00			
	\$10.00			

We expect customers' orders to flow to the market using the dealer's indicative prices as a guide. The customers are not obliged to place orders "inside" the indicative prices, however.

We recommend that the system employ the following priorities in determining the order of execution:

Price — the best price (highest bid or lowest offer) is always taken first.

Time — at a single price, the first order entered is the first order executed.

Executed trades are recorded... ...and published

<i>To Buy</i>		<i>To Sell</i>		<i>Trades</i>
<i>quantity</i>	<i>price</i>	<i>price</i>	<i>quantity</i>	
		£15.00		
		£14.00	75	
		£13.00	100	
100	£12.50	£12.50	100	100 shares @ £12.50
50	£11.00			
	£10.00			

Execution could take place in the following ways:

- through the matching of customers orders on the CTO
- through buying and selling of a dealer (including indicative prices)
- through buying and selling by a market maker.

Broker are encouraged to make markets and...

<i>To Buy</i>		<i>To Sell</i>		<i>Trades</i>
<i>quantity</i>	<i>price</i>	<i>price</i>	<i>quantity</i>	
		£15.00		
		£14.00	75	
		£13.00	100	100 shares @ £12.50
100	£12.50	£12.50	100 (broker)	100 shares @ £12.50
50	£11.00			
	£10.00			

We encourage brokers to make markets. For large companies, several brokers could become market makers. Multiple competing market makers provide better prices, reduce the pressure on a single market maker and provide more capital for liquidity.

To encourage market making, we propose to work to ensure that there are attractive capital rules that will permit dealers to profit from this activity. Among the inducements for which we will argue are:

- Lower financing costs for inventories
- No dealer obligations that make trading unattractive
- Different levels of obligations for securities with different levels of liquidity
- Capital requirements that are realistic for the level of actual financial exposure
- Good tools for managing risk and financial position

Financing...

...the OTC and in-company trading systems

Financing

Short term

Long term

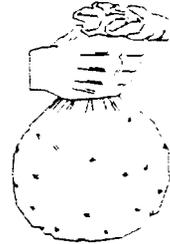


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This section will present the long and short run financing for the in-company and OTC market development. Both trading systems and hardware as well as rules of operation are development costs that must be financed.

Sources of short term financing

- Sale of memberships
- Support from other Polish organizations*
- Contributions from donor agencies**



**** The WSE, Ministry of Finance and the Ministry of Privatization**
**** USAID and other appropriate foreign agencies**

The sale of memberships in the OTC market is important not only as a source of cash flow, but also to ensure brokers' commitment to the market. A broker who pays for membership has a much greater stake in observing the rules of the market than one who bears no financial obligations. This payment need not be a financial burden, since brokers who join the market at its founding will have a two-year "grace period" in which to pay the full fee. During this grace period, these brokers will be able to serve as introducing brokers, but not as market makers, until they pay in full. Membership fees can rise sharply after the initial period of operation, thus giving brokers an incentive to join early.

The contributions made by donor agencies will be helpful in getting the OTC market up and running with suitable technology and systems. Over the long run, the market should be profitable enough to support maintenance of the systems and fund its own staff.

Long-run financing

The market must be self sustaining



Revenue sources:

- Trading fees
- Communication charges
(including sale of market data)
- Listing fees



Major expenses:

- Systems support
- Wages and salaries

Over the long term, an over-the-counter market will be financially.

We cannot forecast today what the proper level of fees will be for the Polish over-the-counter market, since every securities market has different economics. However, observations of other markets shows that as markets mature, they generate revenue from three broad categories of services to listed companies: trading fees, communications charges, and listing fees. Member fees are only a small contribution to revenue. Sales of market data can be an important source of revenue from third parties.

The two largest expenses long term are systems support (i.e., cost of maintaining existing software and systems, separate from any capital expenditure on new systems) and wages and salaries for market employees. Other cost categories—including facilities costs, professional services of lawyers and accountants, depreciation, and general and administrative expenses—are smaller.

Project tasks and timetable



Development phases

Project time line

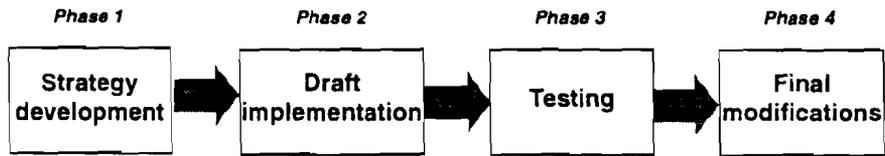
Next steps

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In this section we will describe very preliminary task and time estimates.

OTC and in-company market...

... development will have four phases



We will work in parallel on the OTC system. We hope that manual trading can begin in the fall, and the fully developed system will be ready in 1996.

Next steps

- ZDM reviews Barents' proposal
- Recommends changes
- Modify the proposal
- Build industry consensus
- Plan process
- Initiate development

These will be the goals for the next few weeks

We ask that you review these proposals during the next two weeks. We ask you to provide any suggestions and changes to us by 8 May, 1995. We will present you with a modified version of our proposal by May 28th.

At that point, we will be ready to begin development.

**PROPOSED STRUCTURE AND DEVELOPMENT OF
THE OTC MARKET IN POLAND**

PROPOSAL PREPARED FOR THE FIRST MEETING OF THE TASK FORCE
OF THE ASSOCIATION OF BROKERAGE HOUSES

MAY 12, 1995


BARENTS
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I. INTRODUCTION

On April 26, 1995 the members of the Brokerage House Association ("BHA"), during their First Conference of the BHA in Pultusk, approved three resolutions concerning the BHA participation in the development and management of the OTC market in Poland. The decision of the BHA members unequivocally revealed the will of the Polish brokerage houses in the processes of the OTC development, organization and management. The resolution Nr 2 passed during the conference in Pultusk gave the BHA management board the authority to determine a task-force, which responsibility would be to define a preliminary plan for the OTC organization and beginning trading rules, a task time-table and the budget plan. The preliminary task plan will be presented during the BHA member assembly on May 31, 1995. The assembly members will also evaluate the results of the task-force work as well as determine the permanent strategic task-force for the development and organization of the OTC market in Poland.

The Barents Group, which had the honor to present its own concept of OTC organization and trading during the BHA conference in Pultusk, has been given the task to assist the BHA in their efforts to organize the OTC market in Poland, to assist them in the development of a telecommunications network, and to assist in the implementation of the newest trading technology. The United States Agency for the International Development expressed its willingness to finance some of the costs involved with the OTC market development in Poland. The final scope of the U.S. A.I.D. assistance in the OTC development in Poland will be determined in the budget planning stage of the project.

It is beyond any doubt that the OTC market is a needed link for a mature structure of the capital market in Poland. The planned launch of the Mass Privatization Program in 1995 and the necessity to provide a liquid market for small and medium-size companies in Poland are the bases for the OTC market development in Poland. The newest trading technology based on the continuous trading; on a country-wide telecommunications system linking all OTC market participants, and on an automated clearance and settlement system is our envisioned technology for the OTC market in Poland.

The OTC market development in Poland will consist of two stages. During the first stage the trading will be based on the currently used telephone and fax communications technology. The clearance and settlement system will not be fully automated. During the second stage

the trading system will be fully automated with a built-in component for clearance and settlement. The trading rules and procedures as well as the regulation and surveillance principles should not significantly differ during the two stages of the market development. The Barents Group suggests that the work of the task-force proceed simultaneously along two tracks: on the one hand, the committees created within the task-force should define system solutions for the first stage of the market development, on the other hand, the respective committees should be involved in the system development for the second stage.

II. THE ORGANIZATIONAL STRUCTURE AND THE SRO GOVERNANCE.

A. The SRO advantages

The OTC trading system should be developed within a brokerage firms self-regulatory organization for following reasons:

1. SRO members have technical knowledge and expertise, and are able to act expeditiously and effectively;
2. participation in the development of rules and regulations helps members gain the appreciation for and better understanding of the goals of regulation and the problems concerning it;
3. The basis for SRO regulation is to limit costs and increase profits, which is also the basis for individual brokers activities

B. The Brokerage House Association ("BHA") as a self-regulatory organization for entities participating in OTC trading

We suggest that the BHA, as a self-regulatory organization representing all brokerage houses, be separated from the Polish Banks Association, in order to guarantee the equal access of all brokers regardless whether they are bank-owned or independent.

Since we realize that the BHA has approved the concept of the OTC organization within the SRO under the condition that their SRO powers would be specified in the legislative act, there is a need to expeditiously determine the proposed amendments to the Act On Public Trading of Securities and Mutual Funds.

C. Structure and powers of the BHA as an SRO

In exercising its self-regulatory powers, the BHA must act through a body authorized to direct its activities throughout the entire country. Such a body, hereinafter referred to as the "Board of Supervision and Control" will be able to act more effectively than the general assembly of all members of the BHA. The requirements for selection of members to the Board of Supervision and Control must be established to allow representation of all members of the BHA, regardless of their size, location, etc. Also, representatives of OTC issuers and investors should be members of the Board of Supervision and Control. The reorganized Presidium of the BHA or another body could become the Board of Supervision and Control.

The Board of Supervision and control would be authorized to do the following:

1. To adopt new by-laws of the BHA and the Rules of Fair Practice, for adoption by the general assembly of the BHA;
2. To adopt the Code of Arbitration and subsequent amendments thereto (without submission to the general assembly of the BHA for adoption);
3. To designate a clearing house for use in the OTC market;
4. To create the OTC market operator and adopt rules to govern the OTC market (without submission to the general assembly of the ABH for adoption), including, but not limited to
 - (a) the establishment of criteria for market participant registration
 - (b) the establishment of criteria for security admittance to trading
 - (c) the establishment of procedures for transmitting information about effected transactions, and
 - (d) the establishment of a fee schedule;
5. To adopt other rules, issue opinions and adopt ordinances in order to implement the BHA's goals set forth in its charter and by-laws;

6. To remove a member of the Board of Supervision and Control if the member performs his duties negligently, or refuses to perform, or is unable to perform, such duties.

In carrying out its activities, the Board of Supervision and Control will be supported by several committees, organized functionally, which will consist of members of the ABH.

III. STRUCTURE OF THE OTC MARKET

A. Form and structure of the OTC market operator

We suggest that the entity which will operate and manage the OTC market be formed as a joint stock company solely owned by the ABH. Indirectly, all members of the ABH would own this company. Any profit generated by this company would be used solely for the implementation of the ABH's charter goals.

The company will be managed by its president with direct reports from the heads of the following divisions:

- operations (subdivided into depts. of trading and clearance and settlement)
- systems (subdivided into depts. of computer systems, telecommunications, and information)
- financial planning (subdivided into depts. of accounting and market data)
- office of corporate secretary (subdivided into depts. of law, compliance, arbitration, and issuers and listing)
- personnel

B. Functions of the OTC market operator

The OTC market operator will manage the following systems:

1. trading system
2. information-management system
3. market data system
4. telecommunication system

1. Trading system

The trading system should be established based on the model of the Ideal Central Market. Such a market will have the following characteristics:

- a) the market should attract possibly the greatest number of issuers, buyers and sellers;
- b) the market should have a mechanism to resolve market imbalances between buy and sell orders, as well as a pricing mechanism reflecting the current demand and supply in the market;
- c) prices of securities should depend on received information about issuers - in the absence of information about an issuer, prices should not be susceptible to significant changes;
- d) trading should be conducted based on the following rules:
 - i) price priority - a client's order should be executed at the best possible price;
 - ii) time priority - if two or more same orders are submitted, the order submitted earliest should be executed first;

(Regarding the concept of (i) client limit order priority before dealers or market makers' orders, and (ii) large order priority in the OTC market should be discussed with the Polish brokers.)

- e) during the time the market stays open, the trading system should ensure continuous dissemination of, and a continuous access to, prices quoted by dealers, market makers, and limit orders;
- f) the market should have some "depth" and "liquidity," so that the execution of big orders would not result in significant price changes;
- g) the market should ensure an appropriate level of profit and return on investment to its participants acting for their own account or the account of clients;
- h) there should be a large number of securities trading in the market - in order to avoid duplicating of costs, the trading should be conducted over one system;

(Although trading will focus on highly liquid securities, the trading system should also allow for trading of less liquid securities - thus,

securities in the market should be categorized in accordance with objective standards.)

- i) the market should allow equal access to all its participants;
- j) the market should be subject to effective and rational surveillance;
- k) access to trading systems should not be costly to market participants, should be quick and should ensure effective execution and clearance/settlement of transactions in the automated electronic systems;
- l) the system should enable fast dissemination of information about executed transactions and dissemination, in real time, of information about quoted prices and number of offered securities;
- m) the system should be open for other securities, e.g. derivatives, which will complement the main securities market;
- n) the market should provide and maintain current trade information, namely, information about prices, trading volumes and financial condition of issuers;
- o) the trading system should provide incentives for order execution in the OTC market, as opposed to another market.

The trading system should be designed and built to incorporate the above features of the Ideal Central Market. In developing the actual system, we will consider combining the features of continuous order-driven system with continuous quote-driven system. The Central Table of Offers (the "CTO"), based on the Central Limit-Order Book integrated with dealers and market-makers' quotes may provide a starting point for discussion about the model of the trading system appropriate for the Polish OTC market.

2. Information-management system

The information-management system will support the trading system in the Polish OTC market. It will support and facilitate market operations, implementation of surveillance, trade monitoring and maintenance of books and records.

3. System of market information

A by-product of the OTC market trading, which is intended for hundreds of small and medium-size companies, will be the availability of a great deal of information about offered prices and number of shares, executed transactions and aggregate trading volumes. This information must be organized, processed and maintained, and will be sold to market-data-vendors. Traditionally, sale of market data is a source of significant revenues.

4. Telecommunication system

Trading in the OTC market will be carried out based on the telecommunication network which provides quick access to all participants in the market. The establishment of the telecommunication network which would connect all participants is anticipated for the second stage of the development process. The telecommunication network must provide access to the CTO, from the CTO to a clearing house and the National Depository, and from the clearing house and the National Depository to all participants. The working group will determine the necessary parameters of the system and its scope throughout the country and will design a detailed budget for the system, including the anticipated cost per participant.

C. Surveillance of the OTC market

1. Surveillance of trading

Tasks

- direct contact with a person supervising quotations in a brokerage house (the "BH")
- control of the contents of orders, time of their submission to a BH and time of their transmission to the CTO
- control of the parameters of executed transactions
- monitoring a BH's compliance with daily changes of prices
- monitoring compliance with maximal spreads between bid and ask prices quoted by market makers
- current control of order execution up to the size of the obligatory trading unit
- automatic triggering of control procedures in cases of significant changes in the price of executed transactions or significant increase in the volume of transactions
- monitoring distribution of current information
- triggering market stabilization procedures
- verification procedures in order to prevent price manipulation

Powers

- to suspend or cancel quotations
- to void transactions

2. Surveillance of issuers

Tasks

- maintaining a register of OTC issuers; determining whether an issuer qualifies to have its name entered in the register or whether its name should be deleted from the register
- monitoring OTC issuers, particularly with regard to their compliance with information reporting requirements
- monitoring dissemination of information about OTC issuers

3. Surveillance of brokers

Tasks

- maintaining a register of brokers participating in the OTC market
- designing qualifications necessary to have a broker's name entered on, or removed from, the register
- monitoring compliance with the Rules of Fair Practice, including, e.g., checking submitted orders for preference of a broker's order over a client's order, inside trading, etc.
- surveillance of a degree of diligence exercised in searching for and matching client orders with orders published in the CTO or in the Book of OTC Securities

4. Surveillance of brokerage houses

Tasks

- maintaining a register of BHs participating in the OTC market and determining whether a BH's name should be entered on, or removed from, the register
- maintaining a list of errors made by BHs and their ranking

- verification of technical, operational, communication, and data safety systems in a BH
- verification of contract notes
- review of transaction documenting compliance
- verification of data transmission to the CTO
- cooperation with a clearing house to determine whether orders have securities' and money coverage
- monitoring dissemination of information about issuers

5. Surveillance of market makers

Tasks

- monitoring market makers for inability to adhere to quoted prices and number of shares
- surveillance of information disseminated by market makers (to the CTO and other market participants)
- setting up procedures designed to reveal and prevent arrangements between and among market makers

It would be appropriate to consider whether, as part of this process, BHs should be surveilled for compliance with net capital rules set forth in the ordinance of the Securities Commission of March 17, 1994. In some countries, for example, the USA, the financial situation of OTC participants is verified by an SRO in order to enhance safety in the market.

D. The OTC trading system

Trading in the OTC market should be based on the principles mentioned above in Chapter III.B.1. "Trading System," to ensure equal access to all participants and that the market be effective, liquid and safe. These principles should be in effect in the first and second stages of the market development. Trading in the OTC market will be dematerialized and will be carried out by authorized BHs. Information about offers gathered in the CTO will be publicized (in the first stage of market development it is possible to use "Telegazeta" - the Polish version Teletext). Also, information about executed transactions will be transmitted to the CTO and, afterwards, publicized. We suggest that the seller

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transmit the information about the last sale within a specified period of time after the transaction is executed, e.g., within the next 10 minutes. As the system develops further, in particular, in the second stage, the principles of trading may be adjusted to the requirements of specific trading system. However, their fundamental character to ensure the effectiveness, liquidity, safety and equal access in the market, may not change.

E. The OTC clearance and settlement system

The clearance/settlement system must ensure safety of operations for market participants and their clients. Since the fundamentals of trading and transaction execution adopted by the Warsaw Stock Exchange are different from those envisioned for the OTC market, the clearance/settlement system in the OTC market will be different from the system in existence on the Warsaw Stock Exchange. The OTC market operator should undertake to match offers on the CTO, confirm transaction execution on the CTO or outside the CTO, and prepare documents for clearance/settlement. The scope of tasks to be performed by the CTO and the scope of tasks to be performed by a clearing house must be discussed and determined. Also, the role of the National Depository and the possibility of extending the Guarantee Fund to OTC transactions must be determined in the near future.

F. Rights and obligations of OTC participants

Brokerage houses will participate in the OTC market and, given the particular characteristics of that market, will be divided into two basic groups:

- OTC market participants, and
- market makers

The OTC market operator will maintain appropriate registers for the two groups of market participants. Brokerage houses participating in the OTC market will participate in routing client orders to the CTO and will be able to buy and sell securities for their own account. Market makers will be obligated to quote prices on a continuous basis and honor client orders at quoted prices up to the specified obligatory unit of trade. The system of competing market makers has proven in many countries to be a very effective market system. Polish brokerage houses should become familiar with this system, since its application in Poland might turn out to be very profitable for them. The working group should prepare a detailed description of activities to be undertaken by market makers, including mechanisms to make such activities safe. If the

concept of short sale is permitted in Poland, such a mechanism will certainly facilitate market makers' activities.

G. Issuers and other securities and financial instruments in the OTC market

Initially, the OTC market will provide a trading place for shares of companies participating in the Mass Privatization Program. This market will also provide a market for other small and medium companies in Poland. Initially, the only securities traded in the OTC market will be equity shares, but it is anticipated that other instruments will be added in time, such as, e.g., debt instruments, derivatives, etc.

OTC issuers should cover the cost of participation in the OTC market. Revenues generated from such a source will cover the cost of admitting to trading and the cost of regulation and surveillance of the market.

IV. ARBITRATION AND RULES OF FAIR PRACTICE

A. Arbitration

All disputes resulting from the activities of a member of the ABH and relating to its clients or another member of the ABH should be resolved in the arbitration process in accordance with the rules adopted by the Board of Control and Supervision. Such rules should, among other things, regulate issues such as the membership of arbitration panels, applicable procedures, dispute resolution in clearance/settlement matters, statute of limitations, etc.

B. Rules of Fair Practice

All OTC participants will act in accordance with the rules of fair practice applicable to the financial services sector, including the existing rules of ethical behavior applicable to brokers. All such rules would require honesty in dealings with clients, taking reasonable care in carrying out professional duties and acting in accordance with the law.

Rules of Fair Practice would, among other things, require that brokers' fees be rational and just for all clients and that prices of securities reflect market conditions and the related cost borne by a brokerage house. At the same time, an OTC market participant must be able to make a profit.

Rules of Fair Practice would prohibit dissemination of misleading and inaccurate information about transaction prices, their size, etc.

Rules of Fair Practice would require that bid and offer prices quoted by market makers, together with an offered number of shares, be honored. If a market maker cannot honor its quotations, its market activities should be suspended.

Rules of Fair Practice would prohibit using inside information. Further, an OTC market participant whose employee wishes to perform services for another OTC market participant, should register any such activity.

Certain additional issues would also need to be regulated, such as, for example, the maintaining of certain records by OTC participants (e.g., the records of clients' complaint); making available to clients, upon request, information about the financial condition of an OTC market participant; internal surveillance and compliance; and the dissemination of market information by, or on behalf of, an OTC market participant. Rules of Fair Practice would also include procedural rules relating to the submission of complaints to the ABH, the review process and sanctions for non-compliance.

V. SCHEDULE OF TASKS RELATING TO THE DEVELOPMENT OF THE OTC MARKET

The project relating to the establishment of the OTC market in Poland is certainly a very complex undertaking. In Appendix I we outline the general plan and specific tasks. These tasks will be subsequently subdivided. The working group should develop an initial schedule for the commencement and completion of the project.

A. Plan of project implementation

Barents Group suggests that the members of the working group selected by the Presidium of the ABH be divided into the following sub-groups:

1. Legal and procedural.
2. Trading,
3. Clearance and settlement,
4. Technical systems, and

5. Financial planning.

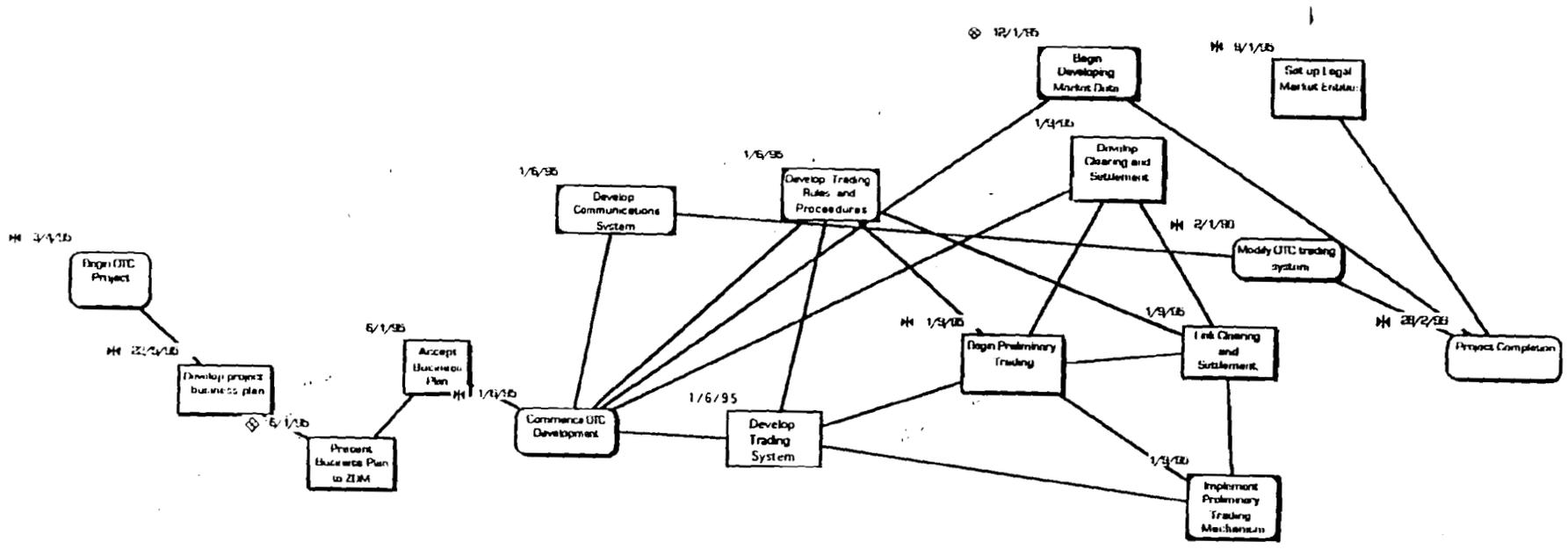
Barents Group further suggests that the following persons from the Barents Group be added to the above sub-groups:

1. Legal and procedural - Krystyna Boron,
2. Trading - Nick Niehoff and Roman Lewszyk,
3. Clearance and settlement - TBD,
4. Technical systems - Joe Oliver, and
5. Financial planning - Susan Nolen.

B. Proposed Budget

The Financial Planning sub-group will develop the initial budget for the project, based on the size of financial assistance from USAID, fees of members of the OTC market operator, etc. For comparison, we enclose in Appendix 2 certain financial information about the New York Stock Exchange, the American Stock Exchange and NASDAQ. We also present certain items as percentage ratios. We believe that this information will be helpful in developing the budget and projections on anticipated revenues and expenses of the OTC market operator, as indicated in Appendix 3.

APPENDIX A: PROJECT TIME PLAN



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Appendix 2

Representative Income Statements from US Stock Markets				
Amounts in thousands of US dollars				
New York Stock Exchange				
	1994	1993	Line items as % of tot	
Revenues				
Listing fees	180561	179152	39.92%	40.26%
Trading fees	92080	89872	20.36%	20.19%
Market data fees	68063	64072	15.05%	14.40%
Regulatory fees	50512	46941	11.17%	10.55%
Facility & equipment fees	33643	33486	7.44%	7.52%
Membership fees	6125	6148	1.35%	1.38%
Investment and other income	21295	25366	4.71%	5.70%
Total revenues	452279	445037		
Expenses				
Compensation	152194	150057	40.90%	43.07%
Systems and related support	140049	120992	37.63%	34.73%
General and administrative	22613	23900	6.08%	6.86%
Occupancy	22079	22655	5.93%	6.50%
Depreciation & amortization	21732	19346	5.84%	5.55%
Professional services	13473	11462	3.62%	3.29%
Total expenses	372140	348412		
Income before taxes	80139	96625		
Provision for income taxes	36160	42694		
Net income	43979	53391		
American Stock Exchange				
	1993	1992	Line items as % of tot	
Revenues				
Listing fees	16113	14159	12.30%	12.37%
Trading fees	44307	36113	33.82%	31.54%
Communication charges	55046	47639	42.01%	41.61%
Membership fees	2853	2768	2.18%	2.42%
Investment and other income	12705	13810	9.70%	12.06%
Total revenues	131024	114489		
Expenses				
Compensation	54614	51218	45.61%	45.81%
Systems and related support	27512	26635	22.98%	23.82%
General and administrative	16510	12709	13.79%	11.37%
Occupancy	8045	8833	6.72%	7.90%
Depreciation & amortization	8778	8662	7.33%	7.75%
Professional services	4285	3753	3.58%	3.36%
Total expenses	119744	111810		
Income before taxes	11280	2679		
Provision for income taxes	4473	1371		
Net income	6807	1308		

Appendix 2

NASDAQ				
	1993	1992	Line items as % of tot	
Revenues				
Market data/trans.service	113464	96281	34.16%	36.43%
Issuer fees	70679	44357	21.28%	16.78%
Registration/exam fees	40400	34770	12.16%	13.16%
Membership fees	37453	37202	11.28%	14.08%
Corporate finance fees	23121	15785	6.96%	5.97%
Interest and other	19877	17435	5.98%	6.60%
Regulatory + arbitration	27153	18444	8.17%	6.98%
Total revenues	332147	264274		
Expenses				
Compensation	123564	105573	44.93%	47.24%
Systems and related support	25921	15563	9.42%	6.96%
General and administrative	23714	18899	8.62%	8.46%
Occupancy	18725	18611	6.81%	8.33%
Depreciation & amortization	18456	21738	6.71%	9.73%
Professional services	44729	35295	16.26%	15.79%
New system development	19926	7797	7.24%	3.49%
Total expenses	275035	223476		
Income before taxes	57112	40798		
Provision for income taxes	8517	5743		
Net income	48595	35055		

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OVER THE COUNTER MARKET																					
Financial Projections		1995				1996				1997				1998				1999			
	Q1	Q2	Q3	Q4																	
CAPITAL EXPENDITURES																					
Hardware																					
Software (purchase and modification)																					
Communication																					
Total Capital Expenditures																					
REVENUES AND EXPENSES																					
Revenues																					
Listing fees																					
Trading fees																					
Market data fees																					
Communication charges																					
Membership fees																					
Regulatory and arbitration																					
Corporate finance fees																					
Registration/exam fees																					
Facility and equipment fees																					
Investment and other income																					
Total Revenues																					
Expenses																					
Compensation																					
Systems and related support																					
General and administrative																					
Depreciation and amortization																					
Professional services																					
Total Expenses																					
Net Income/Loss																					
INITIAL SOURCES OF FUNDING																					
Purchase of market memberships																					
USAID																					
Other funding sources																					

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POLISH OTC TRADING SYSTEM AND SRO

DRAFT FINANCIAL PROJECTIONS

I. HOW TO UNDERSTAND THESE NUMBERS

Goals

The purpose of these financial projections is to provide an initial framework for understanding the future revenues and expenses of the Polish over-the-counter market. These projections are *not* final. The authors expect and plan to revise them frequently as the development of the over-the-counter market continues. The future members of the OTC market should regard this framework as a tool for their financial planning. It should be useful for them both as users of the system who will pay for its services and as owners who must manage its future. As the owners of the market, they will be responsible for setting revenue levels and controlling expenses and will ultimately determine the financial and operational success of the market.

Sources of These Projections

The initial *framework* for these financial projections derives from the detailed chart of accounts of the Cincinnati Stock Exchange, which provided a comprehensive list of revenue and expense accounts. The Cincinnati Stock Exchange developed this chart of accounts over a number of years, drawing on both their own experience and the experience of other U.S. markets. Income statements from the New York Stock Exchange, the American Stock Exchange, and the National Association of Securities Dealers, with revenues and expenses expressed as percentages of total revenues and expenses, provided a comparative basis for understanding the potential revenue and cost structure of the Polish market. The authors also reviewed income statements from the Warsaw Stock Exchange and London Stock Exchange, but their costs were not specified in sufficient detail to be helpful for this analysis.

The *data* currently in the model derived from a number of sources. As much as possible, cost levels are based on actual cost numbers. Where numbers have had to be projected, these projections have been based on sources which include (but are not limited to) Barents Group experience in other markets, forecasts by Polish brokers, a study of Polish telecommunications by an independent expert, and analyses of historical data from the Warsaw Stock Exchange. Again, these numbers will be updated and revised as the project advances.

Structure of This Model

This model *includes* cash inflows and outflows resulting from the self-sustaining operation of a normally staffed OTC market. The components of the cash inflows and outflows are discussed in detail in the sections that follow.

The model deliberately *excludes* the following items:

Development costs: The project development budget is currently being created with comparisons to other recent projects, such as OTC market development in other countries, the Ministry of Privatization Fiscal Agent project, and the project to establish the KDPW as an independent legal entity. Components of this budget will include Polish project staff, foreign consultants, certain hardware, software, and communication costs, and certain other start-up expenses. This budget, when completed, will be reviewed with the BHA and submitted to USAID for consideration and approval.

Other capital expenditures and/or fee level changes: As the OTC market matures, management and the board will have to decide how to use its positive net cash flow. One option is to reinvest the cash flow into further capital investment. Another is for the OTC entity to reduce the fees charged to brokers. This model does not specify how the cash flow should be used, but does indicate (in the "System Improvements and Fee Reductions" line on the final page) that the members of the market should budget their income so as to provide some reserve funds, but not to accumulate capital.

Depreciation and amortization: Since the capital expenditures in the development phase are yet to be determined, and since the model is on a cash rather than an accrual basis, depreciation and amortization are excluded. However, depreciation of hardware and amortization of software will have a major impact on the OTC entity's income statement.

Taxes: Taxes are excluded from this model. Without depreciation and amortization and other non-cash expenses, it is impossible to state the accounting income of the OTC entity.

Inflation: Forecasts are in constant US dollars. In the actual operation of the OTC entity, all cash flows will be denominated in zloty. While there is no guarantee that zloty-denominated revenues and expenses will increase at the same rate, the model shows sufficient positive cash flow (before capital expenditures and fee adjustments)

II. CASH INFLOWS

Assumptions about Market Activity

Assumptions about market activity are important drivers for the rest of the model, since variable revenues and expenses are assumed to vary along with market turnover. Line by line, the assumptions about market activity are as follows:

Companies entering market/total companies in market: Initially, the model assumes that companies enter the OTC market from the Mass Privatization Program (MPP). The estimates for how many companies will enter the market in each of the five fiscal years are based on discussions with the Ministry of Privatization. Additional companies may enter the OTC market over the course of the five years, which would be an additional source of revenue.

Market capitalization: These figures are based on the book value for the four hundred companies currently earmarked for the MPP. The total book value of these companies is 65 trillion old zlotys (=6.5 billion new zlotys or USD 2.708 billion at a rate of 2.4 new zlotys/1 USD). The average book value of each of the four hundred companies is thus USD 6.77 million. The ratio of market capitalization to book value used in the model is .74, a conservative number which represents only one-third of the 2.33 average market capitalization/book value on the Warsaw Stock Exchange over the past three years.

Daily turnover as a percentage of market capitalization is assumed to be 0.62%, which is one-half the average daily turnover as a percentage of market capitalization on the Warsaw Stock Exchange over the past three years.

Average daily turnover is computed from the two preceding lines: market capitalization x daily turnover as a percentage of market capitalization.

Average trade size is an assumption which derives from comparisons with the Warsaw Stock Exchange.

Trades per day is computed as the quotient of average daily turnover divided by average trade size.

Trading days per year is 220, except in year one, where trading begins only in November, giving a maximum of 110 trading days.

Brokerage houses in market is taken as a conservative thirty for the first year. Since brokerage houses' initial initiation fees constitute a significant proportion of year one cash inflow, the model ought not to inflate this inflow by assuming that all brokerage houses will join the OTC immediately. Additional brokerage houses are assumed to join the market each year beginning in year three.

Assumptions about Fee Levels

Initial listing fees and subsequent annual company fees: The fees listed here are comparable with those currently charged by the WSE Parallel Market. Rather than charging a flat fee per company, the OTC could base its charges on the size of the company's capital being traded on the OTC market. The members of the market can explore this question in more detail once they have more specific information about the companies to be listed. These fees can rise as the market grows and a listing on it becomes more and more valuable.

Trading fees per side: This fee is set at one-half the current WSE trading fee per side.

Pre-comparison fees per side: Since the National Securities Depository requires that trades be locked-in, the OTC market will contain a pre-comparison function. The charge per side of a trade approximates the current KDPW comparison fee.

Communication charge per transaction: At 50 cents per side of a transaction, this charge is currently assumed to cover approximately one-half of the operating costs of

the communications network in years one and two and almost all of these costs in years three through five. The structure of these charges will need to be examined in detail as the project develops to ensure that costs are fairly "mutualized" among members.

Price of membership from brokerage houses: The model assumes that brokerage houses will pay a one-time initiation fee of \$20,000. Payment will be spread over two years, with a payment of \$10,000 each year. The figure of \$20,000 is acceptable to the Presidium of the BHA.

Yearly dues per brokerage house: The \$2,000 figure is one-half that currently charged by the Warsaw Stock Exchange.

Market data revenues: These are currently set as a percentage of total revenues. Market data revenues can derive from several sources: from a fee charged to brokers for the information that appears on terminals in their offices and from a fee charged to investors for market data. The percentages here are conservative, since they assume that the data to investors sold will comprise only last sale and inside quotations. If investors are provided with "view only" screens that include all the information provided to broker/dealers, the potential revenue stream is much larger.

Revenue Sources

The revenue sources shown in the model derive from the assumptions as stated above. Please note that participants on both sides of a trade will pay the fees for trading, pre-comparison, and use of the communications network. Fees for arbitration are assumed to cover the costs of arbitration and provide a small profit. Additionally, should the OTC market could derive investment income from on any earnings its members choose to retain in the business (perhaps as an operating reserve).

Additional Potential Revenue Sources Not Included in Model

- One additional potential source of revenue is charges to issuers for additional share issuances. At their most basic level, these charges would be an additional listing fee and could be charged as a percentage of the amount of capital being raised. Additionally, with the agreement of the SEC, the SRO could perform additional oversight functions and receive fees for them. For example, the NASD reviews the underwriting structure for new issues to ensure that the underwriter compensation is not fraudulent.

III. CASH OUTFLOWS

Staffing

Staffing costs are divided among five major categories: systems, operations, finance, legal/SRO, and management/administration, which includes marketing and business development. In the first year of operation, the Barents Group proposed budget (subject to USAID approval) will provide staff for systems development, operations

development, legal and SRO development, and general business development. In all probability, many of these personnel will be hired by the OTC entity in year two, since these staff will be well-acquainted with the operations of the OTC.

The financial projections presented here include head counts and salary levels only for the staff employed by the OTC. The projections envision a level of staffing to cover the necessary operations of the OTC, but members may choose to add staff in some areas as the OTC trading system and SRO expand the sphere of their activities (e.g., trading in other securities or greater self-regulatory powers). Salary figures are competitive current Warsaw levels. Please note that the figures given include a 48.5% levy for social security.

A fuller description of the suggested staffing in each area follows below.

Systems: The systems team for the on-going operation of the OTC will include a systems manager, an eight-person team to operate and maintain the existing software system, two people to perform communications maintenance, and a minimum of two people for systems enhancement. Should the members of the OTC decide to embark on a major systems enhancement project, more staff can be added in this area.

Operations: The chief operations manager will supervise two departments. The administration department will include staff to supervise trading and listing as well as a help desk that will answer user questions and direct them onwards if necessary (e.g., to communications maintenance). The trade pre-comparison department will prepare trades for sending to the Depository and will notify users if trades do not match properly.

Finance: This department will have a chief financial officer and controller. Payroll and billing functions are assumed to be processed outside the OTC entity (fees for this service are classified under professional services, below), but could also be included here with the addition of staff.

Legal/SRO: The lawyer in this department will perform general legal services for the OTC entity. Additionally, funding is allocated under professional services for an outside counsel who would advise as necessary on specialized issues or issue opinion letters.

The SRO staff will include at a minimum staff to work on the development of investor protection and the development of counterparty rules, as well as market surveillance. The staff earmarked for SRO support could perform such functions as examination of brokerage houses and monitoring of their net capital. Their tasks will depend on what regulatory authority the Security and Exchange Commission agrees to delegate to the SRO. Staff will be added as areas where self-regulation is permitted expand.

Management/administration: Management includes a chief executive officer, marketing and public relations staff, a personnel director, and secretarial staff.

Premises

Rent and VAT on rent: The model assumes that the OTC entity will be housed in a 750 m² space, which includes 500 m² office space for 45 people, 50 m² for the data center, 50 m² for conference space, 80 m² for social and common space, and 70 m² for dead space. Because of the importance of good communications links, the OTC entity will need to have high-quality office space in Warsaw. Based on current market prices, we estimate that the monthly rent for such space in Warsaw will be the equivalent of USD 50/m²/month. VAT is leveled on rent payments at a rate of 22% and is payable by the lessee. In year one, the OTC entity is assumed to occupy the premises for only six months.

Yearly utilities costs are estimated at 5% of rent payments.

Insurance against theft and acts of God for the hardware and office furnishings is estimated for \$1.5 million worth of equipment at prevailing Warsaw rates.

The *services of an outside security service* to guard the premises are also charged at a market rate.

Systems

The line for *license fees* assumes that at least some software will be purchased from a third-party provider. This line is subject to revision once a software solution is chosen.

Communication costs consist of the costs of using a third-party X.25 provider between the central OTC data center and six regional nodes. The figures in this model are based on estimates of the costs of using Sprint as this provider. According to Barents initial research, the on-going costs of using the Sprint network vary only with the number of lines that brokers wish to connect to the network. Sprint's user fees do not vary with the level of message traffic. Telbank and Polpak, two competing X.25 providers, increase their charges as message traffic increases, and with current information it is not possible to predict what they might charge at the level of message traffic foreseen in this model. However, this topic is still under study and the numbers are subject to revision.

Hardware maintenance costs assume that a 5% annual fee on an initial \$1.5 million purchase of data processing and communications hardware. These numbers are subject to revision as the hardware needs of the OTC become better defined. Depending on which communications provider is chosen for the X.25 network, some network maintenance costs may be covered in the communications costs. Additional hardware purchases by the OTC entity will also lead to additional maintenance costs.

General and Administrative

With the exception of steering group and board costs, all general and administrative costs are assumed to increase as market activity increases. The cost levels below are estimates based on costs paid by other businesses in Warsaw. Over the long run, OTC

management is responsible for determining what level of costs is appropriate in each category.

SRO functions are assumed to include training and publications both for market participants and for investors.

Travel/international organizations costs include memberships as well as attendance at organization meetings, as well as the cost for OTC staff to travel within Poland.

Conferences/user committee costs are for the OTC entity to promote knowledge of the OTC market and to meet periodically with users. These User Committees should provide feedback to OTC staff about the quality of their operations and suggest changes and enhancements.

Steering group/board costs include the yearly costs of a five-person board. Compensation for board members is customary in Poland.

Business entertainment costs include lunches and dinners with potential issuers and others.

Phone costs are for local as well as long-distance calls.

Stationery and supplies costs include costs of postage as well as office supplies.

Arbitration committee costs are assumed to be fully covered by fees paid by parties.

Promotional information costs include annual reports and promotional brochures as well as other advertising.

Professional Services

Professional services costs are set at rates currently prevailing locally.

Legal support, as mentioned above, includes the yearly cost of outside counsel to provide specialized advice and third-party opinions.

External audit will be conducted on a yearly basis. When the OTC entity is able to budget for one, an audit by an internationally recognized auditing firm will increase investors' confidence in the market.

Payroll system costs could alternatively be handled by staff employed by the OTC entity.

Consultancy costs cover the costs of outside experts in any areas where the OTC management feels that their aid will be useful and cost-effective.

DRAFT FINANCIAL PROJECTIONS FOR OTC TRADING SYSTEM AND SRO

GENERAL NOTES FOR THESE FINANCIAL PROJECTIONS

- * All amounts are in constant US dollars.
- * Fiscal years run from June 1 to May 31.
- * Revenues and costs are on cash basis. Depreciation and income tax are not included.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 5 %
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CASH INFLOWS

NOTES FOR CASH INFLOWS PROJECTIONS

- * Assumption lines are numbered so that the reader can see which revenue sources derive from each assumption.
- * Brokerage house membership purchases are assumed to occur over two years (\$10,000 each year).
- * Arbitration committee revenues are assumed to cover arbitration committee costs.

Assumptions--Market Activity

1	Companies entering market over fiscal year		30	100	200	50	50
2	Total companies in market		30	130	330	380	430
3	Market capitalization (USD) -- 74% of MPP book value	\$	150,312,500	651,354,167	1,653,437,500	1,903,958,333	2,154,479,167
4	Daily turnover as % of market cap		0.62%	0.62%	0.62%	0.62%	0.62%
5= 3*4	Average daily turnover	\$	931,938	4,038,396	10,251,313	11,804,542	13,357,771
6	Average trade size	\$	1,500	3000	3000	3000	3000
7= 5/6	Trades per day		621	1346	3417	3935	4453
8	Trading days per year		140	250	250	250	250
9	Brokerage houses in market		30	30	45	55	60

Assumptions--Fee Levels

10	Initial listing fee per company	\$	1,500	1750	2000	2500	3000
11	Annual fee per company (after first year)	\$	1,500	1500	2000	2000	2500
12	Trading fees per side (as % of transaction value)		0.085%	0.085%	0.085%	0.085%	0.085%
13	Pre-comparison fee per side (flat fee)	\$	0.25	0.25	0.25	0.25	0.25
14	Communication charge per transaction (flat fee)	\$	0.50	0.50	0.50	0.50	0.50
15	Price of membership from brokerage houses	\$	20,000	20,000	20,000	20,000	20,000
16	Member dues per brokerage house per year	\$	2,000	2000	2000	2000	2000
17	Market data revenues as % of total revenue			5%	5%	10%	10%

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 5 %
<i>Revenue Sources</i>						
=5*8*12x2 Trading fees	\$ 221,801	1,716,318	4,356,808	5,016,930	5,677,053	57.29%
=7*8*13x2 Pre-comparison fees	\$ 43,490	168,266	427,138	491,856	556,574	5.62%
=7*8*14x2 Use of communications network	\$ 86,981	336,533	854,276	983,712	1,113,148	11.23%
=1*10 Initial listing fees	\$ 45,000	175,000	400,000	125,000	150,000	1.51%
=2*11 Annual fees from companies	\$ 45,000	195,000	660,000	760,000	1,075,000	10.85%
* Purchase of memberships by brokerage houses	\$ 300,000	300,000	150,000	250,000	150,000	1.51%
=9*16 Member dues	\$ 60,000	60,000	90,000	110,000	120,000	1.21%
Market data	\$ -	156,331	368,196	867,176	990,938	10.00%
* Arbitration fees	\$ 5,750	19,167	57,500	67,083	76,667	0.77%
TOTAL CASH INFLOWS	\$ 808,022	\$ 3,126,615	\$ 7,363,918	\$ 8,671,757	\$ 9,909,378	100.00%

CASH OUTFLOWS**Notes on Staffing Projections**

*The head counts and salary levels provided below are those for the staff which the OTC entity itself will employ and pay.

*During the development phase of the OTC project, the Barents Group proposed budget (subject to approval) will provide staff in the following areas:

- * Systems development, including software and telecommunications
- * Operations development, including trading and trade pre-comparison
- * Legal development and development of the SRO
- * General business development

*Actual staffing costs in year 1 represent an average of six month's employment.

*Year 2 head counts include development team staff who are subsequently hired by the OTC entity.

*Salary figures shown include 48.5% ZUS (social security levy).

Staffing--Head Counts	Salary (\$000)	Number of Staff			
<i>Systems</i>					
Systems manager	35	1	1	1	1
Operators	20	3	3	3	3
Archivist	20	1	1	1	1
Data base manager	20	1	1	1	1
Systems programmer	20	1	1	1	1
Software maintenance	20	2	2	2	2
System enhancement	20	2	3	3	3
Communications maintenance	20	2	2	2	2
Total systems staff		13	14	14	14

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 5 %
<i>Operations</i>							
Chief operating officer	35	1	1	1	1	1	
<i>Administration</i>							
Trading	27		1	2	2	2	
Listing	20	1	2	2	2	3	
Help desk	20	1	2	3	4	5	
Trade pre-comparison (KDPW requires locked-in trades)							
Manager	20	1	1	1	1	1	
Staff	20	<u>1</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	
Total operations staff		5	10	12	13	15	
<i>Finance</i>							
Chief financial officer	35	1	1	1	1	1	
Controller	20	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
Total finance staff		2	2	2	2	2	
<i>Legal/SRO*</i>							
Lawyer	35		1	1	1	1	
SRO—investor protection rule development	27	1	1	2	3	3	
SRO—counterparty rules/arbitration	27	1	1	1	1	1	
Market surveillance	27	1	1	1	1	1	
SRO support (examination/monitoring)	20	<u>0</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	
Total legal/SRO staff		3	7	9	11	12	
*Additional SRO staffing depends on further discussions with SEC, which now performs all regulatory functions other than counterparty rules and arbitration.							
<i>Management/Administration</i>							
CEO	60	1	1	1	1	1	
Marketing/PR	20	1	2	2	2	2	
Human resources	20		1	1	1	1	
Secretaries/reception	15	<u>3</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>	
Total management staff		5	8	8	8	8	
Total Staff Count		15	36	45	48	51	

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 5 %
Staffing Costs						
Systems	\$ -	275,000	295,000	295,000	295,000	11.40%
Operations	\$ 57,500	222,000	269,000	289,000	329,000	12.71%
Financial	\$ 27,500	55,000	55,000	55,000	55,000	2.13%
Legal/SRO	\$ 40,500	116,000	143,000	170,000	170,000	6.57%
Management	\$ 62,500	180,000	180,000	180,000	180,000	6.96%
Total staffing costs	\$ 188,000	848,000	942,000	989,000	1,029,000	39.76%

Notes on Premises Projections

*Premises projections assume that the OTC entity pays for six months' occupancy in year 1.

Premises	m ²	\$/m ² /year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 5 %
Rent	750	600	\$ 225,000	450,000	450,000	450,000	450,000	17.39%
VAT on rent			\$ 49,500	99,000	99,000	99,000	99,000	3.83%
Utilities			\$ 11,250	22,500	22,500	22,500	22,500	0.87%
Insurance			\$ 10,000	20,000	20,000	20,000	20,000	0.77%
Security			\$ 15,000	30,000	30,000	30,000	30,000	1.16%
Total premises			\$ 310,750	621,500	621,500	621,500	621,500	24.01%

Notes on Systems Projections

*Communications costs projected here are based on one vendor's proposal, but are subject to revision.

*Communications maintenance costs may be partly covered by communications vendor.

*All maintenance costs shown here do not reflect the cost of maintaining hardware purchased after initial development.

Systems	Year 1	Year 2	Year 3	Year 4	Year 5	Year 5 %
License fees	\$ 50,000	50,000	50,000	50,000	50,000	1.93%
Communications costs	\$ 163,500	\$ 165,750	\$ 168,000	\$ 170,250	\$ 172,500	6.67%
DP hardware maintenance		35,000	35,000	35,000	35,000	1.35%
Communications hardware maintenance		40,000	40,000	40,000	40,000	1.55%
Total systems	\$ 213,500	290,750	293,000	295,250	297,500	11.50%

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 5 %
General & administrative						
SRO functions (training, publications, etc.)	\$ 5,000	20,000	25,000	30,000	35,000	1.35%
Travel/international organizations	\$ 5,000	20,000	40,000	45,000	50,000	1.93%
Conferences/user committee	\$ 5,000	20,000	40,000	45,000	50,000	1.93%
Steering group/board costs	\$ 50,000	50,000	50,000	50,000	50,000	1.93%
Business entertainment	\$ 2,500	7,500	10,000	12,500	20,000	0.77%
Phone	\$ 2,500	8,333	25,000	29,167	33,333	1.29%
Stationery & supplies	\$ 10,000	30,000	40,000	45,000	50,000	1.93%
Arbitration committee costs	\$ 5,000	16,667	50,000	58,333	66,667	2.58%
Promotional information	\$ 10,000	33,333	100,000	130,000	160,000	6.18%
Total general and administrative	\$ 95,000	205,833	380,000	445,000	515,000	19.90%
Professional services						
Legal support	\$ -	50,000	50,000	50,000	50,000	1.93%
External audit	\$ 10,000	25,000	25,000	25,000	25,000	0.97%
Payroll system	\$ 10,000	25,000	25,000	25,000	25,000	0.97%
Consultancy	\$ -	25,000	25,000	25,000	25,000	0.97%
Total professional services	\$ 20,000	125,000	125,000	125,000	125,000	4.83%
NORMAL OPERATING CASH OUTFLOWS	\$ 827,250	\$ 2,091,083	\$ 2,361,500	\$ 2,475,750	\$ 2,588,000	100.00%
Note on System Improvements and Fee Adjustments						
*This line is included as a general item. The brokers who own the market will have to decide whether to invest cash flow into further development or to reduce fees for the benefit of market participants.						
SYSTEM IMPROVEMENTS AND FEE ADJUSTMENTS	\$ -	35,532	4,002,418	5,196,007	6,321,378	
TOTAL CASH OUTFLOWS	\$ 827,250	2,126,615	6,363,918	7,671,757	8,909,378	
NET CASH FLOW BEFORE TAXES	\$ (19,228)	1,000,000	1,000,000	1,000,000	1,000,000	

PROJECT DEVELOPMENT BUDGET

The budget is being refined with comparisons to similar recent projects, such as OTC market development in other countries, the MOP Fiscal Agent project, and the project to establish the KDPW as an independent legal entity. Components of this budget will include Polish project staff, foreign consultants, certain hardware, software, and communication costs, and certain other start-up expenses. This budget, when completed, will be reviewed with the BHA and submitted to USAID for consideration and approval.

DEVELOPING THE CONSENSUS MODEL
WORK PLAN FOR THE CONTINUATION OF
SRO AND OTC DEVELOPMENT



Warsaw, Poland
July 31, 1995

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I. INTRODUCTION

This document:

- describes work done to date on the “Developing the Consensus Model” task order;
- describes an overall approach to continuing work on building a self-regulated over-the-counter securities market; and
- describes the main tasks involved in this approach and, for each, lists the objective, work done by Barents so far, remaining subtasks, recommended timing, and recommended level of effort.

The first appendix to this document contains Gantt charts which depict each major task and accompanying subtasks. The second appendix contains a budget, which represents Barents’ recommendations on the level of expatriate and local labor needed for each task as well as procurements necessary to complete the project.

II. BACKGROUND

Throughout the “Developing the Consensus Model” task order, Barents Group has been working with the Brokerage House Association (BHA), which represents 95% of the broker/dealers in Poland, to create a model for a self-regulated over-the-counter securities market in Poland. Barents proposes the following as economic justifications for such a market.

- The regulatory structure of the over-the-counter market will benefit *investors*. The success of the Polish over-the-counter market will be measured by the high standards of its self-regulatory organization (SRO). The SRO will adopt and enforce just and equitable principles of trade; provide routine surveillance, audits, and examinations of members; provide rules of fair practice and business conduct standards; and adopt or adjust rules and regulations as the capital markets of Poland evolve and flourish.
- The over-the-counter market will benefit *small- and medium-sized companies (issuers)*. These companies typically do not qualify for listing on the Warsaw Stock Exchange (WSE). The recently passed Ordinance on Forms of Regulated Over-the-Counter Secondary Trading in Securities allows such companies to issue shares which will be traded on an over-the-counter market. Creation of such a market is thus essential for these issuers.
- An over-the-counter market will benefit *Polish broker/dealers*. The 99% government-owned Warsaw Stock Exchange limits broker/dealer self-governance and imposes artificially low limits on transaction fees. A member-owned OTC market would give broker/dealers an opportunity to control more aspects of their own business. In particular, the introduction of market-making on the OTC market would allow broker/dealers to make higher profits, thus providing liquidity and benefiting both investors and issuers.

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- An over-the-counter market will benefit *local municipalities*, which are no longer receiving funding from the central government. Therefore, these authorities will need to raise money through public offerings. Since most municipalities will not qualify for a WSE listing, we envision that they will want to list their bond issues on an OTC market.

Given the need for such a market, Barents has worked closely with the BHA and its members to promote the market's development. Highlights of Barents-BHA cooperation include:

- On April 25-26, 1995, Barents Group gave a detailed presentation on requirements for a self-regulated over-the-counter market to the First BHA Conference in Pultusk, Poland. This presentation discussed general principles of self-regulation, proposed an SRO organizational and governance structure, and described how an OTC trading system would potentially work. As a result of this presentation, the BHA voted to proceed with the development of an SRO and an OTC market for Poland and to accept funding from USAID for this purpose.
- Throughout May, 1995, Barents Group worked with an interim Strategic Group that had a thirty day mandate to develop further the ideas set forth on April 26. As a result of this effort, Barents drafted a document, "Proposed Structure and Development of the OTC Market in Poland," which presented Barents' model for the SRO and OTC market in Poland.
- At the Annual Member Meeting of the BHA on May 31, 1995, Barents facilitated the BHA's passing of a resolution which approved the "Proposed Structure and Development of the OTC Market." Further, a permanent elected Strategic Group was assigned to work with Barents on further development of the project.

Barents' cooperation with the Strategic Group has proven very effective. Regularly scheduled meetings with the group and subcommittees have yielded a solid work plan and laid the foundation for developing the SRO and OTC Operating Entity. Currently, Barents is assisting the group in the following efforts:

- proposals for development of the charter and by-laws of the future self-regulatory organization as well as the OTC operating entity;
- proposals for creation of trading and clearing/settlement rules;
- analysis and determination of trading system functional requirements;
- analysis and determination of telecommunications system functional requirements;
- planning for marketing and business development of the future OTC market.

The Strategic Group's schedule of events for fall 1995 is an aggressive one. This schedule reflects the intensity of the work being performed in the above-mentioned areas and the need for broker/dealers to be prepared for the start of the Mass Privatization Program, which will produce the first companies for OTC trading. We list these events here because our recommended work plan has been designed to support these activities.

- August 21-23 - First Annual BHA Technical Conference, featuring vendor presentations of trading systems and clearing and settlement systems
- August 22 - a seminar on trading and clearing/settlement system and on brokerage houses' technical requirements for OTC trading
- September 12 - a seminar on rules and procedures for trading and clearance/settlement
- September 18 - presentation of draft charter, by-laws, and descriptive materials on trading systems and rules to the Presidium of the BHA
- September 19-20 - approval of the presented materials and documents for the Extraordinary Member Meeting of the BHA
- October 12 - Extraordinary Member Meeting of the BHA
- November 14 - meeting of OTC operating entity shareholders and incorporators

The work plan which follows in these pages describes the tasks needed to finish the development and implementation of an SRO and OTC market on the basis of the work already performed by Barents and the BHA.

III. TASKS

General Overview

Barents views the following nine tasks as essential to the creation of the SRO and the OTC market:

- Development of an SRO
- Development of the OTC Operating Entity
- Development of the OTC trading system
- Development of the OTC telecommunications network
- Development of the OTC precomparison system
- Development of the OTC data base/management information system (MIS)
- Development of the OTC surveillance system
- Development of the OTC guarantee fund
- Development of the OTC investor protection fund

While the following sections present specific subtask activities and timing in detail, at this point Barents would like to describe its overall vision of the unfolding of the project.

In the first three months of the project, Barents recommends focusing on the most fundamental and time-sensitive activities. In particular, one crucial factor affecting the project timetable is the immediate need to create a market for shares issued by small and medium-sized companies as part of the Mass Privatization Program. To this end, Barents recommends focusing on the following tasks:

- *Structuring and developing an SRO and an OTC Operating Entity.* Creation of the SRO is essential to provide self-regulation for the OTC market; creation of the operating entity includes such essential activities as developing trading rules.
- *Creating an interim trading system that will be operational by October 15, 1995.* A basic system, with data base and data dissemination functions, is needed to meet the immediate needs of issuers, investors, and broker/dealers who want to trade MPP company shares.
- *Developing a precomparison system for OTC clearing and settlement.* So that shares traded on the OTC market can be cleared through the National Securities Depository (NSD), development of a precomparison/lock-in function is essential.
- *Building a consensus regarding the structure and operation of the long-term OTC trading system.* It is very important that the Polish broker/dealers understand the range of options available for a long-term OTC trading system as well as the cost/functionality tradeoffs associated with each option. Therefore, Barents suggests that work on building a consensus on the long-term system begin immediately at the start of the project, concurrently with the development of the interim system.

After the first three months, once a basic infrastructure for the market is in place, work can begin on both refining the organizations and systems that have been created and on creating supplemental organizations and systems. Barents therefore recommends focusing on the following tasks:

- *Strengthening and refining the SRO and the OTC Operating Entity.* For example, rules and regulations for both entities may be revised in light of experience once trading has begun.
- *Development and implementation of the long-term trading system.* Once the broker/dealers have chosen a system with costs and functionalities appropriate to their needs, work can begin on procuring and developing this system.
- *Building appropriate telecommunication systems and linkages to support OTC trading.* For the more sophisticated long-term trading system, a country-wide telecommunication network will be needed. To this end, Barents recommends close coordination with USAID's existing "Common Brokerage Operations" project and its telecommunications development effort.
- *Developing a full scale OTC data base/management information system.* Such a system could enable a variety of useful functions, including but not limited to: sale of market data, interaction with the PSC's EMITENT issuer data base, and support of the finance functions of the OTC Operating Entity.
- *Developing a market oversight and surveillance system.* Such a system would enhance the surveillance capabilities of the SRO, especially if linked on-line to the OTC data base system.
- *Developing an OTC guarantee fund.* Discussions are needed with the NSD to determine whether such a fund could be part of the current guarantee fund for WSE trading or would need to be separate.

- *Developing an investor protection fund.* Barents recommends examining the political and legal feasibility of such a fund, which has been suggested by some market participants but may prove to be very controversial.

The steps for working on these individual tasks are detailed in the following pages.

A. Development of an SRO

Objective: Creating a member-operated OTC market in Poland provides an opportunity to implement an effective self-regulatory organization for the brokerage industry. Although the Polish Securities Commission is a strong regulator and enforcer of investor protection rules, an SRO would benefit the Polish market in several ways. First, it would raise the level of voluntary compliance and knowledge of market practices by brokers, strengthening and integrating the Polish brokerage community. Second, it would relieve the Polish Securities Commission from its increasing duties in broker compliance, surveillance, and enforcement, thus allowing the Commission to allocate its resources to such important areas as issuer registration, memorandum of information and prospectus processing as well as further legislative initiatives.

Work Done by Barents to Date:

- Barents has spent considerable time describing to the BHA the values of self-regulation and has won agreement by the members to the idea of establishing a self-regulatory organization.
- Barents has investigated the important issue of whether to use an existing organization for the SRO or to create a new SRO entity (discussed below) and has developed recommendations on this question.
- Barents has created a questionnaire for distribution to BHA members outlining key decisions that must be made before the creation of the SRO entity.
- In the second deliverable for the "Developing the Consensus Model" task order, Barents developed financial projections for the on-going operation of the SRO.
- In a recent visit to the Securities Industry Association (SIA) trade show in the US, Barents representatives introduced two Strategic Group members to high-ranking NASD staff for the purpose of understanding the NASD SRO model.

Tasks: The first task in developing the SRO is deciding whether the SRO should be based in an existing organization or be a newly created entity. Barents has been examining this politically charged question. Forming the SRO on the basis of the existing BHA would probably be unacceptable, since the BHA is part of the Polish Bank Association and does not have a separate charter. Our preliminary discussions suggest that separating the BHA from the Bank Association would be controversial and not effective. Therefore, Barents recommends that the BHA remain an industry association (similar to the Securities Industry Association in the United States), whose functions primarily involve administration and lobbying and that a new SRO be created. The newly-created SRO entity would have an explicit mandate to regulate the OTC market, and to propose and

adopt rules of arbitration, disciplinary procedures, membership requirements and standards, ethical standards, and capital requirements. In order for the SRO to be effective, the PSC must delegate some regulatory duties and responsibilities to the SRO. Barents will facilitate this process and consult with the PSC on possible amendments to the law.

Additional tasks in creating the SRO will include:

- Recommendations on organizational structure and staffing.
- Recommendations on membership requirements and standards.
- Recommendations on capital adequacy and net capital requirements.
- Recommendations on SRO rules and regulations, including disciplinary and arbitration rules and procedures.
- Development of an operating budget.
- Training for SRO staff.
- Development of broker/dealer examination requirements and programs.

All proposed rules and regulations should be submitted to the Polish Securities Commission for review, discussed with the Commission and market participants, and revised as necessary.

Timing: Barents recommends that work on the development of the SRO continue as expeditiously as possible. To correspond with the schedule set out by the Strategic Group, which provides for the creation of the OTC Operating Entity by November 14, work must be planned so that the SRO can be created by November 14 as well. We suggest that recommendations in all the areas named above be developed and submitted to the Polish Securities Commission by October 1, 1995, thereby allowing six weeks for revision and debate. Once trading begins on the system, there should be periodic reviews of rules and regulations.

Level of Effort: Barents recommends the creation of a legal team that will work on the development of the SRO and the creation of other entities specified in the other organizational development tasks as well. An U.S. lawyer with experience in self-regulatory organizations should lead the team. Ideally, Polish lawyers with experience at the Polish Securities Commission would also be members of this team, as their experience in Polish securities law would be invaluable. Barents also recommends that NASD staff consult in the setting-up of the SRO and developing initial rules and procedures.

B. Development of the OTC Operating Entity

Objective: The entity that operates the over-the-counter securities market should provide and guarantee fair representation for all members, regardless of their size, volumes of trading, or level of commission revenues. This will help ensure a dynamic market with broad-based participation. Barents therefore recommends the OTC operating entity should be a corporation organized and owned by its members.

Work Done by Barents to Date:

- In the second deliverable for the "Developing the Consensus Model" task order, Barents developed financial projections for the on-going operation of the OTC operating entity, including a forecast \$20,000 capital contribution from each brokerage house to the OTC Operating Entity. These financial projections were accepted by the BHA Members' Meeting and reviewed by NASD staff.

Tasks: The tasks necessary for the development of this entity include:

- Recommendations for the OTC entity's charter and by-laws, which will guarantee a fair representation of brokers and other market participants to an elected Board of Directors.
- Recommendations on membership requirements and fees.
- Recommendations on listing requirements.
- Recommendations on trading rules and regulations.
- Recommendations on broker/dealer disclosure rules.
- Recommendations on Rules of Fair Practice.
- Recommendations on organizational structure which will include operations, systems, secretariat, financial, and legal departments, and appropriate staffing levels for each department.
- Assistance in training different department staff.

Barents recommends that the operating budget be revised periodically since various assumptions based on share trading volume of MPP companies may change. Additionally, a development budget will need to be created.

Barents also recommends that since the NASD and NASDAQ are known worldwide as an effective self-regulatory organization and over-the-counter market, future events should be planned to increase cooperation between NASD/NASDAQ and the Polish SRO and OTC entity.

Timing: Again, work on the development of the OTC Operating Entity must continue as expeditiously as possible so as to meet the November 14, 1995, date set by the BHA Strategic Group for establishing the entity. Barents suggests that recommendations in the areas listed above be developed by October 1, 1995, and submitted to the Polish Securities Commission on this date. This allows all parties six weeks for review and revision of the recommendations. After initial acceptance, rules will be subject to periodic review.

Level of Effort: Since development of the OTC Operating Entity has crucial legal, financial, and operational aspects, Barents recommends that the leader of the development effort be well-versed in general business operations as well as in Polish securities law. This leader will call upon the resources of the legal team (e.g., for development of rules

and regulations), as well as those of a financial analyst in developing and refining the necessary budgets.

C. Development of the OTC Trading System

Objective: The OTC Trading System will have to meet different needs at different stages in the evolution of the OTC market. In the market's first phase, its main purpose will simply be to provide a market for shares issued through the Mass Privatization Program, thereby serving investors and issuers who would otherwise have no opportunity to trade shares. The trading system should be basic and quickly implemented so as to be in place by the start of the MPP.

As the market evolves, the trading system will evolve as well. A more sophisticated system will be needed to support greater trading volumes. In addition, a more sophisticated system can support such functions as market-making, which will provide liquidity and benefit issuers and investors.

To meet these twofold needs, Barents recommends establishing the OTC trading system in two phases—(1) an interim system to meet the pressing needs of the MPP, and (2) a long-term system to meet the longer-term needs of the Polish securities market.

Work Done by Barents to Date:

- This two-phased systems development approach was presented by Barents at the BHA Annual Member Meeting on May 31, 1995 and was approved by BHA members.
- Barents has developed a schematic for POLSAK ("Polski System Automatycznych Kwotowan" or "Polish System of Automated Quotations"), our proposed Interim Trading System, which has been disseminated to members of the BHA and to USAID.
- Barents has held discussions with TELEGAZETA about the possibility of their serving as the teletext provider for the interim system.
- Barents representatives in attendance at the Securities Industry Association trade show in July searched for potential software solutions for the long-term system.
- Barents has contacted leading software vendors and developers who are potential system providers for the long-term system. These companies will be invited to the August 22-23 conference of the BHA to discuss potential trading systems (a key part of the "Educational/Consensus-Building" task described below).

Tasks—Interim System: To meet immediate market needs, Barents recommends a system in which trading will be between broker/dealers over voice phone lines. The trading system should have the following functions:

1. *Continuous trade reporting to the OTC operating entity central database.* After a transaction is made, a seller will be obligated to send a sale report within a

specified time to the OTC operating entity. PCs and dial-up modems at broker/dealers' offices and at the OTC central site will send and receive transmissions via a single-template input/output software application. Barents is exploring whether the PCs and modems can be procured under Delivery Order No. 42, "Common Brokerage Operations," to provide standardized equipment at the inception of the project; if not, broker/dealers will be expected to purchase this equipment themselves according to recommended standards.

2. *Collection and archiving of data at the OTC operating entity central database.* The OTC operating entity will receive and store the last-sale reports. This function requires procurement of a data base system and requisite hardware for the OTC central site and development of an application for data retrieval and processing. This system will be integral to the needs and requirements of the SRO and its Market Oversight and Surveillance System, MOSS (see below).
3. *Dissemination of last-sale reports through teletext.* Barents believes that transparency is one of the most important features to build investor trust in the OTC market. Therefore, work on the interim system should include a link for last sale trade report data transmission to a teletext system such as TELEGAZETA, which already provides information (including WSE data) to homes and business throughout Poland. Subtasks here include: designing and implementing output software, establishing the data links, and ensuring that the data transmission complies with existing teletext standards and that the intellectual integrity of the data is maintained.
4. *Submission of precompared trades to the NSD.* When a transaction occurs, both the buying and selling broker will be requested to submit a purchase or sale report as appropriate within a specified period of time to the OTC central site, where the precomparison module will process the data and submit locked-in trades to the NSD. Trades will be continuously submitted during OTC market hours in exchange-standard format. The hardware and software required for this module are discussed further below.

To implement the functions discussed above, the following tasks are required:

- Analysis of functional requirements for necessary hardware.
- Analysis of functional requirements for the data base platform.
- Issue of RFPs for hardware and for the data base platform.
- Evaluation of RFPs according to such criteria as:
 - reliability
 - security
 - maintainability
 - flexibility
 - expandability
 - disaster recovery and backup capabilities

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- vendor reliability and performance.
- Procurement of hardware and data base platform in accordance with USAID requirements.
- Development of software applications.
- Agreement with teletext provider.
- Alpha testing of the entire system.
- Beta testing of the entire system.
- Development of documentation and users' manuals.
- Training for broker/dealers and for OTC technical staff.

Tasks—Long-Term System: The eventual trading system to be installed will be much more sophisticated than the interim system. Trading will occur continuously, real time, and on-line over a data telecommunications network that links brokers to one another and to the central processing module. The system will provide for both broker and market maker access and automated executions. The network will manage receipt and broadcast of all data processed by the central processing module. Because this system will be more complex than that currently used on the Warsaw Stock Exchange and therefore is not yet familiar to the brokers, Barents recommends that an Educational/Consensus Building Task precede the actual Systems Development Task.

Educational/Consensus Building Task: This task should be concurrent with development of the interim system and contain the following subtasks:

- Discussion of aspects of the long-term trading system (e.g., issues such as quote-driven versus order-driven systems, a consolidated limit order book, and integrated quote and order systems).
- Consultation with the Polish Securities Commission on the regulatory implications of each trading system.
- Achievement of consensus about trading methodology.
- Development of functional requirements for the trading system.
- Research into potential trading system solutions. Both build and buy alternatives should be considered. Available trading systems should be judged for their relevance and compliance with the recommended functional requirements. Software developers who have designed and installed dynamic processing systems specifically for exchange and SRO applications should be sought.
- Presentation of potential solutions by identified software vendors and developers.
- Comparison of cost/functionality trade-offs.
- Recommendation on buy vs. build.

Systems Development Task: The subtasks under this task will depend in part upon whether the decision reached by the BHA and approved by USAID is to buy or build a system.

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If the decision is made to buy and modify an existing system, the following subtasks are needed:

- Issuance of an RFP.
- Evaluation of responses according to such criteria as:
 - throughput
 - response time
 - reliability
 - security
 - maintainability
 - flexibility
 - expandability
 - disaster recovery and back-up capabilities
 - vendor financial strength and past performance in systems installation and maintenance. In addition, the vendor will be required to provide complete documentation comprehensible to the Polish OTC operations technical staff together with source code and training and a performance warranty for a minimum of one year
- Identification of the best proposal.
- Procurement of the system in accordance with USAID procedures.
- Performance of any necessary modifications.

If the decision is made to build a new customized system, the following subtasks are necessary:

- Issuance of an RFP.
- Evaluation of responses according to the following criteria:
 - throughput
 - response time
 - reliability
 - security
 - maintainability
 - flexibility
 - expandability
 - disaster recovery and back-up capabilities
 - vendor financial strength and past performance in systems installation and maintenance.
- Contract with selected vendor.

In either a buy or build situation, the following subtasks are needed prior to acceptance and delivery of the system:

- Alpha testing of the system.
- Beta testing of the system.
- Development of system documentation and users' manuals.

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- Training for broker/dealers, OTC technical and operations staff, and authorized SRO staff.

Timing: The interim system should become operational by October 15, 1995, and remain in operation until implementation of the long-term system. The interim system should not, however, be completely static, and may be improved and enhanced. As discussed above, consensus-building for the long-term system should begin concurrently with interim system development and last for approximately 90 days. Work on systems development of the long-term system should begin once the buy vs. build decision is made. It is anticipated that the development work will last approximately nine months, and support and enhancement work will continue thereafter for nine months.

Level of Effort: Barents recommends the following team: an expat systems development manager and a Polish technical staff for both the interim and long-term systems, and an in-house software development team for the interim system only. The expat systems development manager will: (1) supervise work on the subtasks listed above, (2) coordinate closely with the leader of OTC Operating Entity Development, and (3) ensure that the Polish technical staff are well trained and fully able to operate the trading system.

The Polish technical staff will consist of system analysts, programmers, and operators who will, both through formal training and on-the-job experience, become fully able to operate the trading system. Barents recommends that the salaries of these staff be paid by the USAID contractor in year 1 and that they move to the OTC Operating Entity payroll in year 2.

Qualified in-house software developers are needed to provide the necessary software for the interim system by October 15, 1995, since the nearness of this date precludes finding third-party software providers.

D. Development of the OTC Telecommunications Network

Objective: Both the interim and long-term trading systems for the OTC market require robust communication linkages designed for expandability. Implementation of the interim system as described above requires telecommunications linkages between the OTC Operating Entity and the NSD, the OTC Operating Entity and the teletext provider, and the OTC Operating Entity and broker/dealers' offices. Implementation of the long-term system will require a more extensive telecommunications infrastructure. This telecommunications network will provide an on-line connection between all participating broker/dealers, enable broker/dealers real-time access to the trading system, and provide an on-line link with the OTC Operating Entity, the NSD, and the PSC. This system could also be enhanced to allow issuers access to the network through an off-line connection to communicate with the OTC Operating Entity and the PSC's EMITENT System (please see below).

Work Done by Barents to Date:

- The Barents team working on the "Developing the Consensus Model" task order has worked closely with the Barents team currently implementing Task Order No. 42, "Common Brokerage Operations," for USAID. Under this task order, Barents is creating telecommunications linkages between the OTC market, the Warsaw Stock Exchange, the National Securities Depository, the Polish Securities Commission, and head offices of member broker/dealers.
- In particular, under the CBO Task Order, Barents Group has already performed a diagnostic study of the telecommunications infrastructure in Poland. The conclusions of this study, supported by additional discussions the "Developing the Consensus Model" team has held with private X.25 network operators such as Telbank, Polpak, and Sprint, indicate that developing a private countrywide X.25 network to meet OTC telecommunications needs is feasible. In fact, from a cost and security feasibility analysis, the only possible network that Barents would suggest for the OTC market would be a private X.25 network.

Tasks: Barents wishes to emphasize that work on this task should continue to be coordinated with the work being performed under the CBO task order. In many ways, the OTC Operating Entity will be a client for the work being performed under the CBO task order and, as a client, will discuss its needs with the CBO team and review their work on OTC-related activities.

For the interim system, the following subtasks are necessary:

- Establishment of a leased line connection between the OTC Operating Entity and the NSD.
- Establishment of a leased line connection between the OTC Operating Entity and the teletext provider.
- Establishment of dial-up connections between the OTC Operating Entity and broker/dealer head offices. Functional requirements will be developed for PCs and dial-up modems. These PCs and modems may be procured under the CBO task order; if not, broker/dealers will purchase them themselves.

The long-term system will involve the development of an X.25 network, preferably a private network for OTC purposes. Implementation of such a network will require the following subtasks under the OTC task order:

- Development of recommendations for linking the broker/dealers, the OTC Operating Entity, the NSD, and the PSC, including disaster back-up/recovery sites.
- Development of recommendations for the interactive linkage between the OTC central processing communication server and the CBO telecommunications network.

The OTC team should work together with the CBO to develop recommendations on the following topics:

- Telecommunication system legal structure/needed permits.
- Telecommunication system organizational structure.
- Network configuration.
- Network system functional requirements/architecture, including analysis of:
 - performance (throughput, response time)
 - voice and data distribution
 - transmission
 - availability and reliability
 - overall effectiveness
 - modular expansion
 - security of data transfer
 - disaster recovery and backup plans
 - communication protocols.
- Creation of projected investment and operating budgets for telecommunications.
- Installation and integration of the OTC central processing communication server.
- Testing of all telecommunications functions.
- Development of system operation and maintenance manuals.
- Training for OTC system operators and participating broker/dealers.

Timing: Work on the telecommunications network should be coordinated with the development of the OTC Trading System, as outlined above, so that necessary telecommunications linkages are established by the time required.

Level of Effort: An OTC communications manager should work closely with both the CBO project team and the teams developing the OTC Trading System to ensure coordination of the two efforts.

E. Development of the OTC Precomparison System

Objective: Securities clearing and settlement in Poland is performed by the National Securities Depository, a well-respected organization which operates in accordance with Group of Thirty recommendations. Development of clearing and settlement for OTC trades presents a new challenge for the NSD. Currently, only WSE-traded equities clear and settle through the NSD. Because WSE trades are priced using a single-price auction, all trades are essentially locked-in (i.e. buyer and seller confirm trade terms) once they are made and before the trade information is forwarded in batch to the NSD for clearing and settlement. This locking-in of trade terms reduces the likelihood of settlement mismatches, delays, and defaults. OTC trading will not be based on a single-price auction; hence trades will not automatically be locked in at one price once they are concluded. Because the NSD will not accept trades which are not locked-in, the OTC Operating Entity will either have to buy or build a system for locking-in OTC trades. This lock-in system would also have to be able to “pre-compare” the terms of the trade before they

could be locked-in by the two counterparties. Since the OTC market will operate on a continuous basis, Barents proposes submitting continuous net trades (CNS) to the NSD. If the NSD cannot accept CNS reports, the OTC precomparison system module will require further modifications.

Work Done by Barents to Date:

- Barents has met with representatives of the National Securities Depository to discuss the NSD's locked-in trade requirement for clearing and settling trades from the OTC market.
- Barents has also met with representatives of Coopers & Lybrand, the contractor currently implementing Task Order No. 16, "National Securities Depository," for USAID, to discuss NSD requirements for clearing and settling trades from the OTC market.
- Barents representatives in attendance at the Securities Industry Association trade show in June searched for potential software solutions to perform precomparison and lock-in processing.

Tasks: Developing this precomparison and lock-in function will be a twofold process. First, for the interim trading system, a basic, semi-manual precomparison/lock-in system should be developed within a department of the OTC operating entity. To do this, the following subtasks are necessary:

- Recommendations on necessary rules and procedures. During the development of these recommendations, the NSD should be consulted frequently to ensure that the system fully complies with NSD requirements for clearing/settlement.
- Recommendations on organizational structure and staffing.
- Analysis of software requirements.
- Recommendations on whether to build or buy/modify the software. (A separate hardware procurement will not be necessary, since the software can run on a PC procured as part of the interim trading system.)
- Recommendations for training operators and participating broker/dealers.

Later, the software will be enhanced to make the precomparison/lock-in function a general feature of the long-term trading system. Barents recommends that an electronic lock-in function be developed, where both participants put their electronic stamp on a single electronic ticket. This would fully automate the precomparison process, further reducing the possibility of unmatched trades.

Timing: The interim precomparison system needs to be completed by October 15, 1995, to go live at the same time as the interim trading system. Enhancement of the precomparison software will be coordinated with development of the long-term trading system as appropriate.

Level of Effort: Barents recommends that an expatriate with experience in clearing and settlement manage development under this task, with assistance from one Polish staff member whom he/she will train to manage the function for the OTC Operating Entity.

F. Development of the OTC Data Base/Management Information System (MIS)

Objective: As discussed above, the Interim Trading System will include a basic data base system for collecting last sale trade reports. Barents recommends that beyond this basic system, a full-scale management information system be developed to support the following functions:

- Sale of trade data to outside vendors, which can become an important revenue source as the OTC market grows in importance.
- Key financial and treasury operations functions (e.g., billing for services) of the OTC operating entity.
- Collection of issuer data such as financial statements, corporate actions, and news alerts. This system will interface with the PSC's automatic issuer data transmission system, EMITENT, whose function is to provide electronic submission of issuer financial reports (much like the EDGAR system of the U.S. SEC).
- Maintenance of a central registration depository with key broker/dealer information (e.g., licensing, disciplinary, and net capital reports).
- Support of the SRO in various areas such as surveillance.

Work Done by Barents to Date:

- Barents representatives in attendance at the Securities Industry Association trade show in June, 1995, searched for potential software solutions for the MIS system.
- Barents representatives arranged a meeting for BHA representatives with representatives from NASD/NASDAQ MIS departments at NASD offices in Washington, DC, in June, 1995.
- Barents has held discussions with the staff of the Polish Securities Commission about linkages with the EMITENT system.

Tasks: The following tasks are essential to developing a MIS system.

- Development of functional requirements for a full-scale MIS system.
- Recommendation of a system.
- Issuance of an RFP.
- Procurement of the selected system per USAID requirements.
- Modifications of the system as necessary.
- Customization of systems documentation and users' manuals.
- Training for OTC and SRO staff.

Timing: As stated above, a basic data base system will be included in the OTC trading system from the beginning of its operation. Work on this full-scale system need not begin until six months after the start of the project, although it may begin earlier if work on other tasks permits.

Level of Effort: In Barents' view, one data base developer and one data base programmer are needed for this task. The data base developer could well be one of the other expatriate systems developers on the project; the data base programmer should be the member of the Polish technical staff who will be responsible for maintenance of the basic data base/MIS.

G. Development of the OTC Surveillance System

Objective: Barents recommends the development and implementation of a market oversight and surveillance system (MOSS). Such a system would strengthen the SRO's oversight capabilities by automating such surveillance functions as stock monitoring and tracking. With an on-line connection to the data base/MIS, the MOSS would allow for on-line monitoring of trades.

Work Done by Barents to Date:

- Barents representatives have received presentations from NASD surveillance staff in Rockville, MD.
- Barents representatives arranged a presentation on market surveillance by NASD staff for two representatives from the BHA as well as Barents staff. This presentation took place at the NASD office in Washington, DC, in June, 1995.

Tasks: The development of the MOSS will entail the following tasks:

- Recommendations on surveillance procedures.
- Recommendations on system requirements.
- Development of an automated stock monitoring and tracking system.
- Establishment of parameters for various stock alert programs.
- Development of procedures related to trading halts and resumption of trading.
- Development of on-line interface with the data base/MIS for real-time monitoring of trading and detection of market manipulation.
- Training for surveillance staff.

Timing: Development of surveillance procedures and training of surveillance staff must begin concurrently with the development of the interim trading system. Enhancement of the surveillance functions (e.g., development of the on-line interface to the OTC data base) will depend upon the development of sophistication of both the long-term trading system and of the data base.

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Level of Effort: The legal team for the project should work closely with the SRO staff for development of surveillance procedures. One of the systems development staff can work on the programming tasks in coordination with the other systems development tasks.

H. Development of the OTC Guarantee Fund

Objective: The OTC Guarantee Fund will protect each broker/dealer in the event of settlement default. (Usually such funds are created by liquid assets on deposit in amounts proportionate to the average money clearing volume of a broker/dealer.) Ideally, this fund will be established as a sub-fund of the existing Guarantee Fund for the Warsaw Stock Exchange. However, if the NSD requires that a separate fund be established for the OTC market, this solution is also possible.

Work Done by Barents to Date:

- Barents has analyzed the feasibility of creating such a fund.
- Barents has held discussions with Coopers & Lybrand about the development of guarantee fund requirements.

Tasks:

- Outline of anticipated OTC Guarantee Fund requirements, considering the likely settlement risks of OTC members and including required deposits to the fund.
- Assessment, in coordination with Coopers & Lybrand, of these requirements against those of the existing NSD Guarantee Fund (the one for WSE trades) to ensure they meet NSD's risk management standards.
- If a separate guarantee fund is required, recommendations to the NSD on design, procedures, and implementation for this fund.
- Consultations with the NSD to ensure that the required deposit amounts are not excessive for broker/dealers.

Timing: Barents suggests that initial recommendations for the guarantee fund be developed by 180 days after the commencement of the project.

Level of Effort: The legal team and the director of the OTC Operating Entity development can work on the legal and political aspects of developing this fund; they may call upon the assistance of a quantitative specialist on questions related to the financial aspects of the fund.

I. Development of the OTC Investor Protection Fund

Objective: An investor protection fund would benefit the OTC market by raising the level of investor confidence in market activities. Such a fund (similar to the Securities Investor Protection Corporation in the U.S.) would provide compensation for each investor, per account, in case a broker/dealer fails and is unable to process investor claims.

Work Done by Barents to Date:

- Barents has analyzed the feasibility of creating such a fund.

Tasks: Barents believes that the first priority under this task is to determine the political and legal feasibility of such a fund. Bank-owned broker/dealers may not wish to participate in such a fund; they would be paying to reduce the perceived risk of the independent broker/dealers in Poland, who have less capital than their bank-owned counterparts and are viewed as more risky by the general public and hence less attractive. Shifting the perceived risk to either a public or private entity will likely create considerable debate among Polish brokers. In addition, creating a fund that is comparable to the Deposit Guarantee Fund newly created in Poland will require enabling legislation. Therefore, before any other work on this task can proceed, further discussions with the brokerage community and government officials on this issue are essential. When the policy issues are sorted out and an appropriate fund entity identified, the following subtasks will be required:

- Recommendations on legal structure, rules and procedures, and organizational structure and staffing.
- Analysis and recommendations on membership fees, maximum coverage per investor account, and methods of information dissemination to investors.
- Development of a comprehensive operating budget.
- Training for broker/dealers on fund rules and procedures.

Timing: Barents proposes that recommendations be developed 180 days after the beginning of the project.

Level of Effort: The legal team and the director of the OTC Operating Entity development can work on the legal and political aspects of developing this fund; they may call upon the assistance of a quantitative specialist on questions related to the financial aspects of the fund.

IV. TIMING

The Gantt charts in Appendix A depict Barents' recommendations for overall project timing. These schedules may need revision during the course of the project, in particular because the project is partly dependent upon the actions of third parties (e.g., the Ministry of Privatization and its schedule for the Mass Privatization Program). Therefore, these timetables should be interpreted as best forecasts only.

V. DELIVERABLES

Barents suggests the schedule of deliverables and delivery dates listed on the following page for key project tasks.

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BENCHMARKS	DELIVERABLES	DAYS*
SRO requirements and recommendations	<ul style="list-style-type: none"> Projected operating budget Written recommendations on: scope of SRO activities, organizational structure, staffing and governance, rules and regulations, membership requirements, disciplinary role and procedures Charter and by-laws of the SRO agreed to by founding members and approved by PSC 	30 60 120
OTC Operating Entity requirements and recommendations	<ul style="list-style-type: none"> Projected operating budget Written recommendations for organizational design, management, staffing, and training Written charter and bylaws of the OTC agreed to by founding members and approved by PSC 	30 60 120
Interim OTC System delivered and made fully operational	<ul style="list-style-type: none"> "Phase 1" trading system described above 	90
OTC Trading System infrastructure requirements (i.e., hardware and software) and associated procurement methods agreed between principal market participants	<ul style="list-style-type: none"> Written recommendations for overall system architecture and hardware and software requirements Written procurement methods 	90 90
Comprehensive investment and operating budgets (including broker fee structure) for OTC Trading System delivered and agreed with BHA and other participants	<ul style="list-style-type: none"> Written operating budget, agreed to by future OTC market members Written investment budget, agreed to by future OTC market members 	60 120
Sources for all investment outlays related to the OTC Trading System infrastructure are identified and fully committed	<ul style="list-style-type: none"> Written analysis of sources for investment outlays and written commitments from third-party sources 	120
OTC Trading System infrastructure procured	<ul style="list-style-type: none"> Equipment procured and present in Poland 	240
Recommendations for Telecommunications System and Linkages delivered and agreed between principal market participants	<ul style="list-style-type: none"> Written analysis and recommendations for telecommunications system and linkages, developed with CBO team and agreed to by future market members, WSE, NSD, and PSC 	120
Recommendations for Clearance and Settlement function delivered and agreed between principal market participants	<ul style="list-style-type: none"> Written recommendations on pre-comparison system, agreed to by future OTC market members and NSD 	60
Recommendations for OTC Guarantee Fund delivered and agreed between BHA, Polish Securities Commission, and other relevant market participants	<ul style="list-style-type: none"> Written recommendations on OTC Guarantee Fund, agreed to by future OTC market members, PSC, WSE, and NSD 	180
Recommendations for Investor Protection Fund delivered and agreed between BHA, Polish Securities Commission, and other relevant market participants	<ul style="list-style-type: none"> Written recommendations on Investor Protection Fund, agreed to by future OTC market members, PSC, and WSE (if required) 	180
Recommendations for OTC MIS delivered and agreed to by BHA	<ul style="list-style-type: none"> Written recommendations for OTC market information system on agreed to by future OTC market members 	210
Recommendations for OTC surveillance system delivered and agreed to by appropriate SRO officers	<ul style="list-style-type: none"> Written recommendations on surveillance agreed to by appropriate SRO officers 	90

* Calendar days following contract execution

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VI. LEVEL OF EFFORT

The level of effort Barents recommends for each specific task is listed above. In this section, we would like to outline how we foresee the overall project team would be structured and how it would interact with the staff of the SRO and the OTC Operating Entity.

Barents recommends the following structure for the implementation team:

- A **Project Manager** with experience in developing automated trading systems should lead and coordinate the overall effort.
- **Task Managers** with relevant experience should lead the following tasks:
 - *SRO/surveillance development.* The leader of this effort will also effectively be the leader of the project's legal team and consult on all legal issues.
 - *OTC operating entity development.* The leader of this effort can also support other organizational development tasks, such as the creation of the guarantee fund and the investor protection fund.
 - *Trading systems development.* The leader of this effort will need to develop software specifications, analyze options during procurement, and ensure the delivery of a quality software system.
 - *Pre-comparison/MIS development.* An experienced system developer can lead both these efforts, interacting with management of the NSD on the pre-comparison system and with the SRO team to incorporate surveillance functions into the market information system.
 - *Communications development.* An experienced telecommunications specialist is needed to work with the CBO task order team to develop and implement communications linkages for the OTC market.
- **Additional in-house staff** will be needed in the following efforts:
 - *In-house software development staff for interim trading system development.* As discussed above, development of software for the interim trading system by the required date will only be possible if the development team is available in-house to begin work immediately with the commencement of the project.
 - *Investor protection/guarantee funds development.* As the legal team works on the development of these funds, they will be assisted by a specialist in quantitative methods for calculating fund requirements.

- *Procurement/budget/reporting.* Because of the complexity of this project and the many procurement and budgeting tasks involved, Barents recommends that a procurement specialist, financial analyst, and project coordinator be assigned to the project.
- Barents recommends that **expatriate experts** be brought in on a short-term basis to share specialized expertise. In particular, experts from the NASD/NASDAQ could provide useful consultation on such areas as SRO regulation or trading system design. Barents also suggests looking to the Financial Services Volunteer Corps and International Executive Service Corps as sources of other specialists.
- **Polish experts** will provide unique local knowledge. For example, the legal team can be staffed by Polish lawyers with experience in local securities law, which will ensure that the proposed SRO regulations comply with existing Polish legislation.
- **Polish staff in training** working for the implementation team will prepare for work at the SRO and OTC Operating Entity. Barents recognizes the importance of having these organizations become self-sufficient as quickly as possible. Therefore, we recommend that the implementation team hire and train Polish staff who can then become part of SRO or OTC Entity payroll at the end of year one of the project.
- **The SRO and OTC operating entity staffs** will work closely with the project implementation team. As part of the “Developing the Consensus Model” task order, Barents developed financial projections for years 1-5 of the on-going operations of the OTC Operating Entity. These financial projections were accepted by at the Annual Member Meeting of the BHA on May 31, 1995. Barents’ projections assume that the OTC Operating Entity will finance its own non-technical staff (including a CEO, CFO, and COO) for year 1 and all its own staff for year 2 and beyond. The implementation team will work closely with these staff members, providing recruitment and training as needed.

Barents believes that this mix of expatriates and Polish staff should ensure quality system development and maximum knowledge transfer. The expatriates in the management team must have unequalled depth in their specialties, such as the design of dynamic processing systems. Barents suggests leveraging this expertise by having these specialists manage and train talented local staff as part of each of the tasks.

VII. BUDGET

The budget presented in Appendix B presents Barents’ best estimates of the cost of completing the work plan described above. Please note two important considerations that may affect the figures shown:

- *Choice of long-term trading system:* The brokers may choose a custom-designed system that combines market-making capabilities with an automatic order matching/execution system. Given the views expressed to date by the BHA Strategic Group, Barents anticipates that this is the most likely outcome. Our preliminary research indicates that the cost of hardware and software for such a system would be approximately \$2.2 million. However, the Strategic Group may endorse buying and modifying an existing system to local requirements. The existing system that Barents is most familiar with is the enhanced NASDAQ system presently being implemented in Russia. The base cost of the enhanced NASDAQ system for both software and hardware would be approximately \$500,000. However, since the NASDAQ system is primarily a market-making system, it may not be adaptable to Poland without major enhancements and modifications which will entail additional expense. Barents will analyze this and other options during the cost/functionality analysis.
- *Project timing:* Barents' current understanding is that work on this project covers a two year time period, but that funding is only available at this time for one year. Given this, our proposal covers two years of work and our budget covers just the initial year's work. We support the idea of a second year to permit additional institutional development and training as well as to create contingency plans for a possible delay in final software development or communication network installation.

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Appendix A

Gantt Charts for Individual Project Tasks

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Appendix B
Proposed Project Budget

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		YEAR I												YEAR II											
		08/95	09/95	10/95	11/95	12/95	01/96	02/96	03/96	04/96	05/96	06/96	07/96	08/96	09/96	10/96	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	
A. DEVELOPMENT OF AN SRO																									
Tasks																									
Definition of scope of SRO activities																									
Recommendations on organizational structure and staffing																									
Recommendations on membership requirements and standards																									
Recommendations on capital adequacy and capital requirements																									
Initial recommendations on rules and regulations																									
Recommendations on disciplinary role and procedures																									
● Projected operating budget																									
● Proposed recommendations on SRO requirements																									
Submission of proposed recommendations to PSC for review																									
Discussion/revision of recommendations with market participants (PSC, KDPW, BHA, brokers)																									
● Final recommendations on SRO requirements																									
▲ Market participants agree on SRO requirements																									
Implementation of initial recommendations																									
Development of arbitration committee																									
Development of training and examination modules																									
● Written description of training program																									
Implementation of training program																									
<i>On-going</i>																									
Relationship management with interested parties (e.g. PSC)																									
Periodic revisions of rules and regulations																									

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	YEAR I												YEAR II											
	08/95	09/95	10/95	11/95	12/95	01/96	02/96	03/96	04/96	05/96	06/96	07/96	08/96	09/96	10/96	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	
	B. DEVELOPMENT OF OTC OPERATING ENTITY																							
Tasks																								
Recommendations for legal structure	█		█		█		█		█		█		█		█		█		█		█		█	
● Charter	█		█		█		█		█		█		█		█		█		█		█		█	
● By-laws	█		█		█		█		█		█		█		█		█		█		█		█	
Schedules to by-laws	█		█		█		█		█		█		█		█		█		█		█		█	
Recommendations on membership requirements and fees	█		█		█		█		█		█		█		█		█		█		█		█	
Recommendations on issuers listing requirements	█		█		█		█		█		█		█		█		█		█		█		█	
Recommendations on trading rules and regulations	█		█		█		█		█		█		█		█		█		█		█		█	
Recommendations on broker/dealer disclosure rules	█		█		█		█		█		█		█		█		█		█		█		█	
Recommendations on Rules of Fair Practice	█		█		█		█		█		█		█		█		█		█		█		█	
Recommendations for organizational structure	█		█		█		█		█		█		█		█		█		█		█		█	
Recommendations on staffing	█		█		█		█		█		█		█		█		█		█		█		█	
● Projection of development budget	█		█		█		█		█		█		█		█		█		█		█		█	
● Projection of operating budget, incl broker participant financing	█		█		█		█		█		█		█		█		█		█		█		█	
Submission of charter and bylaws to PSC for review	█		█		█		█		█		█		█		█		█		█		█		█	
Discussion/revision of recommendations with BHA, brokers, PSC	█		█		█		█		█		█		█		█		█		█		█		█	
▲ Market participants agree on operating entity requirements	█		█		█		█		█		█		█		█		█		█		█		█	
▲ Market participants agree on projected budget	█		█		█		█		█		█		█		█		█		█		█		█	
Selection of site for OTC entity	█		█		█		█		█		█		█		█		█		█		█		█	
Preparation of site (refurbishment and data center set-up)	█		█		█		█		█		█		█		█		█		█		█		█	
Purchase of operating equipment	█		█		█		█		█		█		█		█		█		█		█		█	
Training for OTC entity operating officers	█		█		█		█		█		█		█		█		█		█		█		█	
<i>On-going</i>	█		█		█		█		█		█		█		█		█		█		█		█	
Revision of trading rules	█		█		█		█		█		█		█		█		█		█		█		█	

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		YEAR I												YEAR II										
		08/95	09/95	10/95	11/95	12/95	01/96	02/96	03/96	04/96	05/96	06/96	07/96	08/96	09/96	10/96	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97
C. DEVELOPMENT OF OTC TRADING SYSTEM																								
Tasks																								
<i>Interim</i>																								
	Analysis of functional requirements for necessary hardware	█																						
	Analysis of functional requirements for data base platform	█																						
	Issue of RFPs for hardware and for data base platform	█																						
	Evaluation of RFPs		█																					
	Procurement of hardware and data base platform		█																					
	Development of software applications	█		█																				
	Agreement with teletext provider		█																					
	Alpha testing of entire system				█																			
	Beta testing of entire system				█																			
	Development of documentation and users' manuals				█																			
	Training for broker/dealers and for OTC technical staff				█																			
<i>Long-term Consensus-Building</i>																								
	Discussion of key issues with broker/dealers	█	█																					
	Consultations with PSC on implications of trading systems	█	█																					
	Achievement of consensus on trading methodology	█	█																					
	Development of trading system functional requirements	█	█																					
	Research into potential trading system solutions	█	█																					
	Presentations on potential solutions	█	█																					
	Comparison of cost/functionality trade-offs			█																				
	Recommendation on buy v build			█																				
<i>Long-term Systems Development</i>																								
<i>With buy recommendation:</i>																								
	Issue of RFP			█																				
	Evaluation of responses to RFP			█	█																			
	Procurement of system			█	█	█																		
	Performance of any necessary modifications			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
<i>With build recommendation:</i>																								
	Issue of RFP			█																				
	Evaluation of responses to RFP			█	█																			
	Contract with selected vendor			█	█																			
	Development of the system			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
<i>In either case, these subtasks are needed before delivery:</i>																								
	Alpha testing of the system																	█						
	Beta testing of the system																	█	█					
	Development of system documentation and users' manuals																	█	█	█				
	Training for broker/dealers, OTC staff, authorized SRO staff																	█	█	█	█	█	█	█
	System enhancements																	█	█	█	█	█	█	█

	YEAR I												YEAR II											
	08/95	09/95	10/95	11/95	12/95	01/96	02/96	03/96	04/96	05/96	06/96	07/96	08/96	09/96	10/96	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	
D. DEVELOPMENT OF OTC TELECOMMUNICATIONS SYSTEM																								
Tasks																								
<i>Interim System</i>																								
Establishment of leased line connection between OTC and NSD	█	█	█																					
Establishment of leased line connection between OTC and teletext		█	█																					
Establishment of dial-up links between broker/dealers and OTC			█	█																				
<i>Long-term System</i>																								
Recommendations on telecom system legal structure/needed permits	█	█	█																					
Recommendations on telecom system organizational structure	█	█	█																					
Recommendations on network configuration		█	█																					
Recommendation on network system functional requirements		█	█																					
Creation of projected investment and operating budgets		█	█																					
Development of recommendations for linking broker/dealers, OTC Operating Entity, NSD, PSC			█	█																				
Development of recommendations for interactive linkage between OTC central communication server and CBO network			█	█																				
Issue telecom RFPs (developed during CBO project)						█																		
Telecom procurement (see Section X)							█	█	█	█	█													
Recruit permanent staff							█	█	█	█	█													
Install network											█	█	█	█										
Prepare operating budget											█	█	█											
Install user interfaces											█	█	█											
Install OTC system interface											█	█	█											
Integration testing												█	█	█										
Phase-in operations													█	█	█									
Analysis of training needs																								
● Written description of formal training program																								
Training of brokers/users																								

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		YEAR I												YEAR II											
		08/95	09/95	10/95	11/95	12/95	01/96	02/96	03/96	04/96	05/96	06/96	07/96	08/96	09/96	10/96	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	
E. DEVELOPMENT OF OTC PRE-COMPARISON SYSTEM																									
Tasks																									
	Recommendations on trade reconciliation rules and requirements	█	█																						
	Recommendations for organizational structure and staffing	█	█																						
	Analysis of software requirements	█	█																						
	Recommendations on buy v. build	█	█																						
	Interim software procurement/development	█	█	█	█																				
	Training for operators and broker/dealers			█	█																				
	Software enhancement for long-term system						█	█	█	█	█	█													

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		YEAR I												YEAR II											
		08/95	09/95	10/95	11/95	12/95	01/96	02/96	03/96	04/96	05/96	06/96	07/96	08/96	09/96	10/96	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	
F. DEVELOPMENT OF OTC DATA BASE AND MIS																									
Tasks																									
Development of short-term interim MIS solution		█																							
Training of users on short-term system		█																							
Development of data dissemination software to send data to teletext		█																							
Development of functional requirements for full-scale MIS		█																							
Issuance of RFP		█																							
Procurement process		█																							
Customization of data base and MIS		█																							
Preparation of systems documentation and users' manuals		█																							
Training for users of MIS		█																							

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		YEAR I												YEAR II										
		08/95	09/95	10/95	11/95	12/95	01/96	02/96	03/96	04/96	05/96	06/96	07/96	08/96	09/96	10/96	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97
G. DEVELOPMENT OF OTC SURVEILLANCE SYSTEMS																								
Tasks																								
	Recommendations for market surveillance procedures		█	█	█	█																		
	Recommendations for market surveillance system requirements		█	█	█	█	█	█																
	Development of automated stock monitoring & tracking system						█	█	█	█														
	Establishment of parameters for various stock alert programs						█	█	█	█														
	Procedures for trading halts and resumption of trading																							
	Development of on-line interface with OTC data base/MIS											█	█	█										
	Analysis of training requirements for surveillance staff		█	█																				
	Periodic review and enhancement											█	█				█	█					█	█

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		YEAR I												YEAR II											
		08/95	09/95	10/95	11/95	12/95	01/96	02/96	03/96	04/96	05/96	06/96	07/96	08/96	09/96	10/96	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	
H. OTC GUARANTEE FUND																									
Tasks																									
Outline of anticipated fund requirements				■	■	■	■																		
Assessment of requirements against those of existing Guarantee Fund						■	■	■																	
If separate fund is needed, recommendations to the NSD on design, procedures, and implementation								■	■	■															
Consultations with NSD on required deposit amounts									■	■															

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		YEAR I												YEAR II											
		08/95	09/95	10/95	11/95	12/95	01/96	02/96	03/96	04/96	05/96	06/96	07/96	08/96	09/96	10/96	11/96	12/96	1/97	2/97	3/97	4/97	5/97	6/97	
I. OTC INVESTOR PROTECTION FUND																									
Tasks																									
Determination of the political and legal feasibility of such a fund																									
Recommendations for legal structure of investor protection fund																									
Recommendations for charter and by-laws																									
Recommendations on rules and procedures																									
Recommendations for organizational structure and staffing																									
Recommendations on assessment fees for members																									
Recommendations on maximum coverage per investor account																									
Recommendations on information dissemination to investors																									
Submission of all recommendations to PSC for review																									
Discussion and revision of recommendations (PSC, KDPW, brokers)																									
Analysis of training requirements																									
● Written description of training																									
● Operating budget																									

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Project Number: _____ X
 Contract Number: _____ X
 Task Order Number: _____ X
 Contractor: _____ X
 Project Officer: _____ X
 Voucher Period: 8/1/05-7/31/06

Activity: _____
 Sub-Activity: _____
 Country of Performance: _____

Total Budget Amount: _____
 Total of Prior Approved Invoices: _____
 Total Approved for Payment, This Invoice: _____
 Total Amount Outstanding: 0.00
 FDR Days Total: 1882
 FDR Days Used to Date: 0

I. LABOR

A. "Fixed Daily Rate" Professionals

Labor Category Name (Level)	CV Approval Date (m/y)	Daily Rate	Budgeted Days	Budgeted Amount	This Period Days Billed	Cost	Cumulative Days Billed	Cost	Remaining Days	Remaining Budget	Payment Status						
											This Period Disallowed	Net Pmt. Approved	Cum. Disallowed	Cum. Payment Approved	Rebilled	Total	
Project Manager Level I		\$1,400.00	53	\$74,200.00					53	74,200.00							
Senior Management TBD									0	0.00							
Senior Management TBD									0	0.00							
Project Manager Level II		\$1,250.00	222	\$277,500.00					222	277,500.00							
Project Manager TBD									0	0.00							
Capital Market Adviser Level II		\$1,200.00	1201	\$1,441,200.00					1201	1,441,200.00							
Trading Systems Dev. Mgr. TBD									0	0.00							
Precomparison/MIS Dev. Mgr. TBD									0	0.00							
OTC Operating Entity Dev. Mgr. TBD									0	0.00							
Senior Attorney TBD									0	0.00							
Communications Dev. Mgr. TBD									0	0.00							
Senior Telecom Adviser TBD									0	0.00							
Senior Telecom Analyst TBD									0	0.00							
SRO Specialist TBD									0	0.00							
Surveillance Specialist TBD									0	0.00							
Capital Market Adviser Level III		\$900.00	63	\$56,700.00					63	56,700.00							
Quantitative Methods Specialist TBD									0	0.00							
Financial Analyst III		\$800.00	156	\$124,800.00					156	124,800.00							
Financial Planner TBD									0	0.00							
Project Sector Economist Level IV		\$550.00	252	\$138,600.00					252	138,600.00							
Project Coordinator TBD									0	0.00							
Procurement Specialist III		\$375.00	35	\$13,125.00					35	13,125.00							
Procurement Specialist									0	0.00							
Subtotal, "Fixed Daily Rate" Professionals			1882	\$2,126,125.00	0	0.00	0	0.00	1882	2,126,125.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

B. Local/Third-Country Nat'l. Professionals

Labor Category Name (Level)	CV Approval Date (m/y)	Daily Rate	Multi- plier	Co. S.C. Rate	Burdened Rate	Budgeted Days	Budgeted Amount	This Period Days Billed	Cost	Cumulative Days Billed	Cost	Remaining Days	Remaining Budget	Payment Status				
														This Period Disallowed	Net Pmt. Approved	Cum. Disallowed	Cum. Payment Approved	Rebilled
Capital Markets Adviser IV (See footnote #1 below for details)			83.80%	48.50%		3129	\$492,922.00					3129	492,922.00					
Support Staff (See footnote #2 below for details)						2016	\$218,410.00					2016	218,410.00					
												0	0.00					
												0	0.00					
												0	0.00					
												0	0.00					
Subtotal, Local/Third-Ctry. Professionals						5145	\$709,332.00	0	0.00	0	0.00	5145	709,332.00	0.00	0.00	0.00	0.00	0.00
TOTAL LABOR						7127	2,835,457.00	0	0.00	0	0.00	7127	2,835,457.00	0.00	0.00	0.00	0.00	0.00

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Project Number: X
 Contract Number: X
 Task Order Number: X

Voucher Period: 8/1/85-7/31/86

II. TRAVEL/HOTEL/PER DIEM

	Budgeted Amount	This Period Cost	Cumulative Cost	Remaining Budget
A. Subtotal, Travel/Transportation Costs <small>(See following pages for detailization)</small>	87,500.00	0.00	0.00	87,500.00
B. Subtotal, Hotel Accommodation Costs <small>(See following pages for detailization)</small>	182,807.00	0.00	0.00	182,807.00
C. Subtotal, Per Diem Costs <small>(See following pages for detailization)</small>	40,839.00	0.00	0.00	40,839.00
TOTAL, TRAVEL/HOTEL/PER DIEM	320,946.00	0.00	0.00	320,946.00

Transportation Details

U.A.1. International/Domestic Flights	Initial Approval Date (m/y)	Proposed Travel Dates		Actual Travel Dates		Modification Approval Date	Budgeted Amount	This Period Cost	Cumulative Cost	Destination/Class	Remaining Budget	This Period Disallowed	Net Pmt. Approved	Cum. Disallowed	Cum. Payment Approved		
		From	To	From	To										Rebilled	Total	
International Air							\$77,500										
Domestic Air							\$10,000										
Subtotal, International/Domestic Flights							\$87,500	0.00	0.00		87,500.00	0.00	0.00	0.00	0.00	0.00	0.00

U.A.2. Local Transportation

(Note: Provide lump sum for all individual items under \$50; note items \$50 or more separately.)

Date (m/y)	Budgeted Amount	This Period Cost	Cumulative Cost	Destination/Purpose	Remaining Budget	This Period Disallowed	Net Pmt. Approved	Cum. Disallowed	Cum. Payment Approved	Rebilled	Total
Trans/ Taxi	\$10,000			na							
Subtotal, Local Transportation	\$10,000	0.00	0.00		10,000.00	0.00	0.00	0.00	0.00	0.00	0.00

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Project Number: X
 Contract Number: X
 Task Order Number: X

Voucher Period: 8/1/85-7/31/86

B.B. Hotel Accommodation Details

AID Daily Lodging Rate	Dates dmyy From To	Number of Days	Amount Reimbursable	Budgeted Amount	This Period Cost	Cumulative Cost	Purpose	Remaining Budget	Payment						
									This Period Disallowed	Net Pmt. Approved	Cum. Disallowed	Cum. Payment Approved	Rebilled	Total	
Multiple				\$182,807											
Subtotal, Hotel Accommodation		0.00	0.00	\$182,807	0.00	0.00		182,807.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

B.C. Per Diem Details

AID MAJIC Rate	Dates dmyy From To	Number of Days	Budgeted Amount	This Period Cost	Cumulative Cost	Purpose	Remaining Budget	Payment							
								This Period Disallowed	Net Pmt. Approved	Cum. Disallowed	Cum. Payment Approved	Rebilled	Total		
87			\$40,839												
Subtotal, Per Diem		0	\$40,839	0.00	0.00		40,839.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Project Number: X
 Contract Number: X
 Task Order Number: X
 Voucher Period: 8/1/85-7/31/88

III. OTHER DIRECT COSTS (Country Requirements)

Subcontracts

Other Direct Costs
 Participant Training
 Communications
 Occupancy Costs
 Other Administrative Costs: Poland

Budgeted Amount	This Period Amount	Cumulative Amount
\$50,000		
\$75,000		
\$50,000		
\$50,000		
\$225,000	0.00	0.00

Remaining Budget	CUM. Payment					Total
	This Period Disallowed	Net Pmt. Approved	Cum. Disallowed	Payment Approved	Rebilled	
0.00						
50,000.00						
75,000.00						
50,000.00						
50,000.00						
0.00						
0.00						
225,000.00	0.00	0.00	0.00	0.00	0.00	0.00

TOTAL, OTHER DIRECT COSTS

IV. Media/Commodity Costs

Initial Approval Date (m/y)	Quantity	Unit Price

Computer Equipment
 Hardware/Software/MIS System

Budgeted Amount	This Period Cost	Cumulative Cost	Description of Item(s)
\$2,500,000			
\$2,500,000	0.00	0.00	
\$100,000			
\$2,600,000	0.00	0.00	

Remaining Budget	CUM. Payment					Total
	This Period Disallowed	Net Pmt. Approved	Cum. Disallowed	Payment Approved	Rebilled	
0.00						
2,500,000.00						
0.00						
0.00						
0.00						
0.00						
2,500,000.00	0.00	0.00	0.00	0.00	0.00	0.00
\$100,000						
2,600,000.00	0.00	0.00	0.00	0.00	0.00	0.00

Sub-Total, Media/Commodity Costs

Handling Charge (@ 4 %)

Sub-Total, Media/Commodity Costs

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Project Number: X
 Contract Number: X
 Task Order Number: X

Voucher Period: 8/1/95-7/31/98

TOTAL COSTS

LABOR

Fixed Daily Rate
 Local/Thrd-Country Nationals

LABOR COST

TRAVEL COST

HOTEL COST

PER DIEM COST

OTHER DIRECT COSTS

MEDIA/COMMODITY

TOTAL, LABOR/TRAVEL/HOTEL/PER DIEM/MEDIA/COMMODITY

Budgeted Amount	This Period Cost	Cumulative Cost
Days #		
\$2,126,125	0.00	0.00
\$709,332	0.00	0.00
\$2,835,457	0.00	0.00
\$97,500	0.00	0.00
\$182,607	0.00	0.00
\$40,839	0.00	0.00
\$225,000	0.00	0.00
\$2,600,000	0.00	0.00

Remaining Budget	Budget Utilization
2,126,125.00	0
709,332.00	0
2,835,457.00	0
97,500.00	0
182,607.00	0
40,839.00	0
225,000.00	0
2,600,000.00	0

7127	\$5,981,403	0	0.00	0	0.00
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This Period Disallowed	Net Pmt. Approved	Cum. Disallowed	Cum. Payment Approved	Rebilled	Total
0.00	0.00	0.00	0.00	0.00	0.00

122

Project Number: X
 Contract Number: X
 Task Order Number: X
 Voucher Period: 6/1/95-7/31/98

Budget Footnote # 1

Estimates for Host Country Nationals (Professionals)

	Daily Rate	Multiplier	Social Cost	Total	Days	
Systems manager	\$85	\$71	\$41	\$197	231	
Operator 1	\$50	\$42	\$24	\$116	210	
Operator 2	\$50	\$42	\$24	\$116	210	
Operator 3	\$50	\$42	\$24	\$116	105	
Database manager	\$50	\$42	\$24	\$116	210	
Trading systems staff 1	\$50	\$42	\$24	\$116	210	
Trading systems staff 2	\$50	\$42	\$24	\$116	210	
Pre-comparison manager	\$50	\$42	\$24	\$116	210	
Data base operator	\$50	\$42	\$24	\$116	210	
Support desk manager	\$50	\$42	\$24	\$116	189	
Surveillance-programmer	\$50	\$42	\$24	\$116	210	
Telecom analyst	\$50	\$42	\$24	\$116	126	
Telecom analyst	\$50	\$42	\$24	\$116	126	
Software analyst	\$50	\$42	\$24	\$116	126	
Software analyst	\$50	\$42	\$24	\$116	126	
Senior Polish attorney	\$400	\$334	\$194	\$928	98	
Junior Polish attorney	\$200	\$187	\$97	\$464	80	
Junior Polish attorney	\$70	\$59	\$34	\$162	252	

Budget Footnote # 2

Estimates for Support Staff

Secretary	\$70	\$59	\$34	\$92	252	
Accountant	\$50	\$42	\$24	\$66	252	
Systems Support	\$50	\$42	\$24	\$66	252	
Translator	\$50	\$42	\$24	\$66	252	
Translator	\$50	\$42	\$24	\$66	252	
Translator	\$50	\$42	\$24	\$66	252	
Driver	\$40	\$33	\$19	\$53	252	
Housekeeper	\$10	\$8	\$5	\$13	252	

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