P R O T O K Ò Ł Nr 19/72

z Sesji Rady Technicznej ZOWAR, odbytej w rozszerzonym składzie osób w dniach 23-25.X.72r. przy ul. Limanowskiego 23.

Udział w Sesji wzięli:

1. E. Giera
2. T. Rumińska
3. W. Bellen
4. A. Jordan
5. K. Mędrzycki
6. S. Mrozik
7. M. Głowacki
8. A. Rykowski
9. J. Berliński
10. A. Wiesnowski
11. S. Kwiatek
12. E. Łopacińska
13. Z. Koszewski
14. J. Pradyszczuk
15. M. Klimek
16. S. Trautman
17. J. Kalisiak
18. A. Borkowska
19. W. Wiśniewski
20. M. Sadurska
21. K. Dudkowski

Zebraniu przewodniczył mgr S.Mrozik /wybrany większością głosów drogą jawnego głosowania/. Na wniosek przewodniczącego została wybrana jednogłośnie komisja wnioskowa w składzie:

Przewodniczący	-	E. Łopacińska
Członkowie	-	M. Głowacki
	-	M. Klimek
	-	J. Pradyszczuk

Po ustaleniu Prezydium RT oficjalnie zebranie otworzył dyrektor mgr W.Wiśniewski omawiając przy tym ogólnie obecną sytuację ZOWAR, a w konsekwencji przedłożył zebranym wniosek o wprowadzenie dodatkowego p-ktu do porządku obrad sprawę przedyskutowania kierunków rozwoju i przyszłości ZOWAR.

W imieniu POP i RZ wystąpił K.Mędrzycki apelując do zebranych o wypowiedzi zaangażowane w sprawy ZOWAR. Zgłoszony problem przez dyr. W. Wiśniewskiego na wniosek Przewodniczącego zebrania wprowadzono jako dodatkowy pkt. do porządku obrad, z przeniesieniem do dyskusji na ostatni dzień /25.X.72r./ jako odrębny temat narady /temat ten znalazł odbicie w oddzielnym protokóle/.

Obrady Sesji odbyły się zgodnie z ustalonym porządkiem spraw:

1/ CICS jako program sterujący typu DG/DC na tle zadań ZOWAR-u wynikających z KSI i propagowania standardów IBM - referat /Zał. Nr 1/ wygłosił mgr inż. A.Wiesnowski.

2/ Sprawy techniczne, organizacyjne i ekonomiczne dotyczące sieci POLRAX - referat wygłosił mgr inż. W.Bellen /Raport "Polrax" - Zał. Nr 2/.

3/ Organizacja prac projektowo-programowych w ZOWAR

4/ Zatwierdzenie składu dokumentacji projektowo programowej.

Temat 3 i 4 wyczerpująco przedstawił inż. Z.Koszewski - organizacja prac proj. programowych - zał. Nr 3. Dokumentacja i organizacja prac na komputerze IBM/360 - zał. Nr 4/

W wyniku 2-dniowych obrad i przedyskutowaniu wszystkich wymienionych wyżej problemów - Komisja wniosków, po przeanalizowaniu całości wniosków zebranych w ciągu dwóch pierwszych dni doszła do przekonania, że jedynym rozwiązaniem obejmującym całość zagadnienia będącego tematem posiedzenia jest wniosek dyr. S.Trautmana /Zał. Nr 5/ z uwagi na to Komisja Wnioskowa zaproponowała zaniechania przedstawiania sformułowanych przez zebranych wniosków, z których jedynie mała część nie mieści się w rozwiązaniu zaproponowanych przez dyr S.Trautmana. Są to wnioski dotyczące szczegółów i powinny stanowić jedynie materiał wyjściowy dla Kierownictwa zespołu problemowego proponowanego przez dyr S.Trautmana /zał. Nr 6,7,8/.

Wobec powyższego jako zadanie Nr 1 uznano sprawę organizacji prac projektowo programowych i powołano do realizacji tego przedsięwzięcia z terminem do 31.I.73.

Zespół problemowy zaproponowany przez dyr S.Trautmana.

Kierownik przedsięwzięcia	-	A. Rykowski
Z-ca Kierownika	-	A. Wiesnowski
Zespół Nr 1 /Z1/	-	E.Łopacińska /kierownik/ T.Gryc
Zespół Nr 2 /Z2/	-	M.Głowacki /kierownik/ J.Pradyszczuk /Z-ca/ J.Kalisiak K.Dutkowski

Komórkami wykonującymi zadanie ustalone przez Z-1 jest PP, przez Z-2 są działy ER, SK, DF - Archiwum. Do wszystkich prac pomocniczych jak kreślenie, przepisywanie na maszynie, powielanie, itp. powołany został Zespół pomocniczy w składzie:

A. Shubert
H. Podwysocka
B. Słomska
L. Stańczak

Konsultanci /O/ - Z.Koszewski, S.Mrozik, A.Jordan, S.Trautman
A.Borkowska, S.Kwiatek, M.Sadurska

Na okres od 26.X.72r. - 31.I.73r. osoby powołane do Z1 i Z2 oraz Kierownictwo przedsięwzięcia A.Rykowski i A.Wiesnowski zostaje odwołane od dotychczas prowadzonych prac. W związku z tym Kierownictwo działu ES w zakresie prac prowadzonych nad APZ przejmie na okres ten p. Ziętarski.
Konsultacje dla klientów /w maksymalnie ograniczonym zakresie na ile pozwolą dotychczas zawarte ustalenia umowne/ prowadzić będzie K.Głowacka. Konsultacji dla pracowników ZOWAR udzielać będzie Z-2 we współpracy Z1.
Uruchomienie programów standardowych przez dział ES wstrzymano do 31.I.73r.

Kierownik przedsięwzięcia mgr inż. A.Rykowski zobowiązał się do przedstawienia, grupie konsultacyjnej harmonogramu przebiegu prac nad organizacją prac projektowo - programowych,w dniu 6.XI.72r. godz. 10^{00} ul. Boya 2.

Jednocześnie omówił ogólnie jak widzi realizację tego problemu. Zadaniem zespołu będzie zaproponowanie takiej organizacji, któr zdecydowanie poprawi wykorzystanie komputera zarówno w OS jak i DOS oraz pozwoli programiście na otrzymywanie wyników w krótkich terminach. Na bazie tej organizacji zostanie opracowania dokumentacja, ale taka która będzie maksymalnie użyteczna, a nie jak dotychczas archiwalna.

Zadanie postawione przed grupą problemową jest poważnym przedsięwzięciem, którego nie da się załatwić z dnia na dzień,ale drogą ewolucji poprzez modyfikację aktualnej sytuacji.

Na tym posiedzenie RT zakończono.

Protokółowała:
A.Borkowska

p.o. Zastępca Dyrektora
d/s System. Informatycznych
mgr inż. Sławomir Frankman

Otrzymują:
DS,SP,SE,ES,DF,DE,SK,ER,PP-
E.Łopacińska, A.Rykowski,M.Głowacki
DO.

Załącznik:
Nr 5,6,7,8
Nr 1,2,3,4-otrzymali wszyscy uczestnicy przed posiedzeniem RT.

1. OCENA SYTUACJI

We wszystkich wystąpieniach obecnego posiedzenia RT jak również naradach premiowych, Gł.Analityków, POP i RZ, Dyrekcji ZOWAR-u, przebija jedna zasadnicza kwestia:

- ZŁE FUNKCJONOWANIE MECHANIZMU OBSŁUGI PROJEKT PROGRAM KOMPUTER

Powyższe przyjąłem za kryterium i uznaję, że wszystkie inne sprawy są pochodnymi. Stawiam jednocześnie tezę, że organizacja prac projektowo - programowych jest sprawą Nr 1.

W związku z tym oceniając dotychczasowe próby uporządkowania tej kwestii widzę następujące główne trudności:

- BRAK JEDNOLITEGO FRONTU DZIAŁANIA ZESPOŁU DZIAŁÓW SE wyrażającego się sporami na tle ambicjonalnym, braku taktu, subordynacji, niekoleżeńskim traktowaniem, brakiem wyrozumiałości powodującymi w efekcie:

- OSŁABIENIEM SIŁY MERYTORYCZNEJ ZESPOŁU SE,
- BRAKIEM ODPOWIEDZIALNEJ KADRY WYKONAWCZEJ U SE
- BRAKIEM SŁUŻBY ORGANIZACYJNO-KOORDYNUJĄCEJ O SE.

Oceniam, że najwięcej do powiedzenia a jednocześnie do zrobienia na styku SP i SE ma zespół ES.

Z kolei oceniając trudności SP wydaje się, że można tu podać:

- DEZINFORMACJA WEWNETRZNA SP
- BRAK SŁUŻBY WERYFIKUJACEJ POCZYNANIA PROJEKTOWO-PROGRAMOWE WEWNATRZ SP
- ZBYT DUŻE OBCIAŻENIE KIEROWNIKÓW PROJEKTÓW I JEDNOCZESNA ICH INDOLENCJA ORGANIZACYJNA I DOŚWIADCZENIE.
- MAŁA AKTYWNOŚĆ GŁ. ANALITYKÓW W SPRAWACH ORGANIZACYJNYCH.

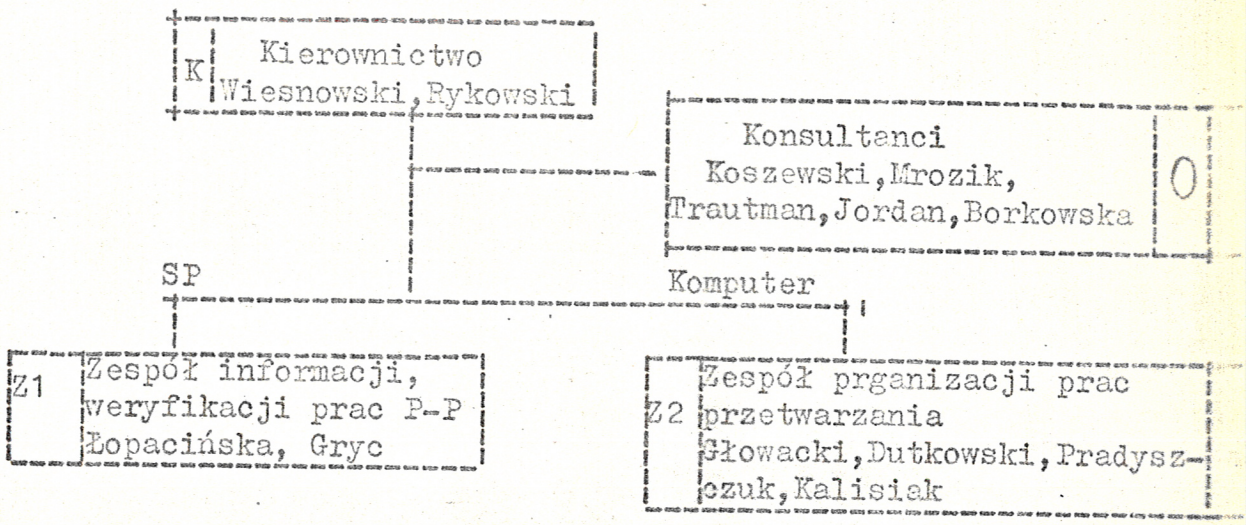
Ogólne kłopoty:

- BRAK INICJATYWY ODDOLNEJ
- WNIOSKI NIEPRZEMYŚLANE

2. WNIOSKI

- UZNANIE SPRAWY ORGANIZACJI PRAC PROJ.-PROGRAMOWEJ JAKO ZADANIE NR Y do wykonania do 31.01.73

- USTALENIE NASTEPUJACEGO ZESPOŁU PROBLEMOWEGO DO WYKONANIA TEGO ZADANIA



- PODPORZADKOWANIE ZESPOŁOWI SŁUŻB WYKONAWCZYCH NA CZAS REALIZACJI PROJEKTU TZN

  Z1 2 osoby z DF, pierwszeństwo prac na xero oraz 2 osoby pomocnicze

  Z2 ER, SK, pierwszeństwo prac na xero, Archiwum oraz 2 osoby pomocnicze

- ODERWANIE OSÒB z K, Z1, Z2 OD INNYCH PRAC DO 31.01.73

- ODDANIE DYSPOZYCJI CZASU KOMPUTERA IBM 360 DLA Z2 /z wyjątkiem umów z Motoprojektem, FSO, IMM/

- ZADANIA ZESPOŁU DO 31.01.72

  ZWERYFIKOWAĆ, ROZPOWSZECHNIĆ I WDROŻYĆ: SKŁAD DOKUMENTACJI PROJ.-PROGR. ORAZ ORGANIZACJE PRACY PROJ.-PROGR. W OS I DOS ZAPROPONOWAŁ NIEZBEDNE ZMIANY W ORG. PRAC i SCH. ZARZADZANIA.

- UPRAWNIENIA ZESPOŁU i DYSPOZYCJA LUDŹMI JAK WYŻEJ I KOMPUTEREM 360, F.BEZOSOBOWY W KWOCIE UMOŻLIWIAJACEJ WYKONANIE NIEZBĘDNEGO INSTRUKTAŻU, PRZYUCZENIA, OPRACOWYWANIE INSTRUKCJI, ZWOLNIENIE OD INNYCH ZAJĘĆ

- UZNANIE SPRAWY ORGANIZACJI SIECI ZDALNEJ TP JAKO ZADANIA NR 2 Z DOCELOWYM TERMINEM 31.12.73 REALIZOWANYM ETAPOWO

  1 ETAP - KONCEPCJA /projekt/ do 15.12.72 zakończony zakupem i zatwierdzonym projektem. Skład zespołu: KOSZEWSKI, RUMIŃSKA, TRAUTMAN, BELLEN, GŁOWACKA, ZIETARSKI

  2 ETAP - REALIZACJA WYCINKÓW:

TERMIN UZALEŻN. OD DATY REINST ok. 30.06.73 lub 30.10.73	KSI - RUMIŃSKA, BIAŁEK, BAŃKOWSKI + Zespół PP DLA WEKTORA I ŚWIATOWID próbnie IMPX - MEDRZYCKI, BELLEN + ZESPÓŁ PP DLA IMPX - ŁOŻYSKA APZ - ZIETARSKI, GŁOWACKA + ZESPÓŁ PP

  3 ETAP - SPRAWY INSTALACYJNE, FINANSOWE: FAŁDYGA, BELLEN, DE + 2 osoby prób.

- PRZEJECIE OBOWIAZKÓW OPERATYWNEGO ZARZADZANIA PROBLEMAMI BIEŻĄCYMI SP i SK przez kol. MROZIKA z maksymalnym wykorzystaniem Systemu ZOWSK 1 + 2 osoby pomocnicze do kontroli prac

- PRZEJECIE SPRAW ZWIAZANYCH Z ZEWNETRZNYM ZABEZPIECZENIEM: TRAUTMAN + KWIATEK /sprawy IBM/

- SPRAWY LOKALOWE zdeklarować DE do bezpośredniej współpracy i nadzoru nad ich realizacją.

- ZAWIESIĆ SPRAWY ZWIAZANE Z DZIAŁALNOŚCIA OSÓB POWOŁANYCH DO ZESBOŁU NR 1 - S.Mrozik, A.Borkowska.

Zał. Nr 6

1/ Po przyjęciu specyzowanego i jasnego kierunku w którym idziemy będzie można przedstawić konkretne opracowanie realizacji.

2/ Proponuję dwa wyjścia /rozwiązania/:

I. Jako system sterujący CRJE i rozwijanie konfiguracji tp pod kątem obliczeń inż. techn.

II. Jako system sterujący CICS, potraktowanie obl. inż.-techn. realizowanych zdalnie jako doświadczenie. Główną część programów dot. tego tematu uruchomić lokalnie licząc się z realizacją KSI w sieci POLRAX ETAP I będzie zbieraniem doświadczeń z obl. inż. techn. i systemów KSI.

3/ Terminal 2740 do ZOWAR dla praktyki i szkolenia,

4/ Przyjąć przedstawioną konfigurację hardwareową jako stałą z możliwością rozbudowy istniejących urządzeń.

5/ Przyjąć pracę tp na I zmianie ustalając priorytety.

6/ Przyjąć pracę tp w OS i wieloprogramowością lokalną.

7/ Zapewnić system ster. dla HYDROPROJEKTu i IMPEXMETALu.

Załącznik Nr 7

W N I O S K I

1. Nie dołączać nowych terminali do zestawu ZOWAR do czasu oprogramowania sterowania istniejących z wyjątkiem dołączania terminali nie wymagających zmian oprogramowania.

2. Realizować w ZOWAR jednoznaczną politykę zastosowania teleprzetwarzania do celów:
   1. zapytań
   2. zbierania danych
   3. utrzymania bazy danych

3. Zakupić CICS ze względu na:
   1. zakres zastosowania
   2. rodzaje obsługi nowych terminali
   3. modularność
   4. elastyczność
   5. względną łatwość wdrożenia

4. Problem obliczeń inżynieryjno-technicznych w ramach sieci usług określonych w umowie z OBRI należy rozwiązać przez eksperymentalne uruchomienie ok. 10 programów z tej dziedziny.

   Całość problematyki przedstawioną na konferencji w Łodzi i określoną w opracowaniu dla OBRI sporządzono w ramach umowy, a więc
   1. Problemy badań operacyjnych i programów optymalizacyjnych
      . Transport, LPS, MPS, PCS, PMS, GPSS, CSMP
   2. Problemy inżynierii budowlanej w ICES
   3. Problemy automatycznego sterowania obrabiarkami
      . APT.
   4. Problemy obliczeń inżynieryjno-matematycznych
      . SSP.

   należy rozwiązać metodą przetwarzania lokalnego. Finansowanie tych prac należy dołączyć do umowy z OBRI.

5. W przypadku stwierdzenia nieefektywnego wykorzystania terminali do obliczeń inżynieryjno-technicznych przeznaczyć terminale będące w dyspozycji Politechniki Warszawskiej do innych zastosowań.

6. Terminal typu 2740 planowany dla ZETO- Lublin przeznaczyć dla ZOWAR w celu umożliwienia testowania i szkolenia.

Wnioski Komisji Zał. Nr 8

1. Proponujemy uznać przedstawioną dokumentację DOS i DPS za materiał wyjściowy do stworzenia standardu dokumentacji obejmującego część eksploatacyjną /DIS, DES/, uwzględniającą potrzeby systemów operacyjnych DOS, OS oraz potrzeby komunikacji programista - operator.

   Proponowani wykonawcy: kol. Z.Koszewski
   kol. A.Rykowski
   kol. M.Głowacki
   kol. J.Pradyszczuk
   kol. M.Klimek

   Termin zakończenia opracowania 15.XI.72r.
   Termin ukazania się dokumentacji w formie aktualizacji VIZ-u - 20.XI.72r.
   Opracowanie powinno określać kto wykazuje poszczególne elementy dokumentacji.

2. Proponujemy aby Kier. Projektu określał format DKS`u i sposób jej utrzymywania.

3. Proponujemy powołać grupę osób dla celów oprogramowania TP, aby odciążyć w tym zakresie dział ES ewentualnie podzielić dział ES na 2 grupy tak, by umożliwić mu wykonywanie innych prac leżących w zakresie jego obowiązków oraz konsultacje dla innych zagadnień projektowanych w ZOWAR`ze

4. Przyjąć, że VIZ jest jedyną formą określania zakazów lub nakazów stosowania określonych rozwiązań progr. - projektowych

   Proponujemy ustalić w RT osobę odpowiedzialną za to, aby postanowienia RT były na bieżąco wprowadzane jako aktualizacja do VIZ`u.

IBM ROECE Inc.

Vienna Branch
Obere Donaustraße 95
A-1021 Vienna, Austria
(Code 0222) 24 36 36
Cable address: Inbusroece
Telex ROECE AZ-7-53-91

Kal. Bollem
22.06.72.

Ing. BOLEK
ZOWAR
ul. Sniadeckich 8
WARSAW

Poznan, June 2o, 1972

Dear Mr. Bolek,

Karl Madaras informed me that you are interested in some price information regarding IBM terminals and modems.

3735/1		Programmable Buffered Terminal	15,232.--
	1oo1	Add. Storage I	1,389.--
	1oo2	Add. Storage II	1,389.--
	395o	5496 Att.	1,165.--
	445o	Forms Stacker	59.--
	4695	Keylock	39.--
	5o1o	Multipoint CLC	672.--
	77o5	Synch. Clock	672.--
226o/1		Display Unit	1,o5o.--
226o/2		Display Unit	1,o5o.--
	36o5	A/N Inset Keyboard	1,26o.--
	36o6	A/N Keyboard	945.--
	36o7	Numeric Keyboard	63o.--
	4765	Keyboard, Alphameric-Num.Ins.	945.--
	4766	Keyboard, Alphameric	63o.--
	4767	Keyboard, Numeric	315.--
2265/1		Display Station	5,88o.--
2265/2		Display Station	5,929.--
	4766	Keyboard A/N	945.--
3271/1		Control Unit, Remote	7,728.--
1Y 3271/2 V		Control Unit, Remote	8,512.--
	325o	Device Adapter	1,2o4.--
	7821	Transmission Speed, 48oo BPS	224.--
	1550	Copy N.C.	
	2813	POWER	
	2927	LANGUAGE	
	7820	1200 BPS TRANSM SPEED	
	9575	SYSTEM 360/50 ATT	

./.

- disk drive 2312-A1 - 25.300 $
- disk pack 2316 . . . 420 $
- 2740 model 002 - 9.016

3275/2

2927 - LANGUAGE
2705 CHAR. GENERATOR
2956 AM ENGLISH KEYBOARD
9575 SYST. ATTCH
5550 PRINTER ADAPTER
2813 POWER

3284/003 PRINTER

4450 FORMS FEED STACKER
2813 POWER
2750 MACH. NOMENCLATURE
2705 AM. ENGLISH CHAR. GEN
9168 PIN FEED PLATEN

3272/002

2813 POWER
2750 NOMENCLATURE US ENGLISH
9480 SYST. OPERATOR CONSOLE
9575 SYST. ATT.

3272/1		Control Unit, Local	8,848.--
1x 3272/2		Control Unit, Local	9,632.--
	325o	Device Adapter	1,2o4.--
3275/1		Display Station, Single Remote	6,384.--
3275/2 - 3x		Display Station, Se	7,5o4.--
	1o9o	Audible Alarm	224.--
	46oo	Operator Identificat.Card RDR	672.--
	✓ 463o	Keyboard 66 Key EBCDIC Typewriter	672.--
	4631	66 Key EBCDIC Data Entry	672.--
	4632	78 Key Operator Console	1,568.--
	4633	78 Key EBCDIC Typewriter	1,344.--
	✓ 634o	Security Keylock	39.--
	635o	Selector Light-Pen	1,12o.--
	7821	Transmission Speed, 48oo BPS	224.--
	5550	PRINTER ADAPTER N.C	
3277/1		Display Station, Clustered	4,o32.--
3277/2		Display Station, Clustered	5,264.--
	1o9o	Audible Alarm	224.--
	46oo	Operator Identificat.Card RDR	672.--
	463o ✓	Keyboard 66 Key EBCDIC Typewr.	672.--
	4631	66 Key EBCDIC Data Entry	672.--
	4632	78 Key Operator Console	1,568.--
	4633	78 Key EBCDIC Typewriter	1,344.--
	634o ✓	Security Keylock	39.--
	635o	Selector Light-Pen	1,12o.--
3284/1		Printer	6,776.--
3284/2		Printer	7,577.--
3284/3		Printer	6,496.--
	445o	Forms Stand	56.--
3286/1		Printer	8,725.--
3286/2		Printer	9,632.--
3286/3		Printer	8,428.--
	445o	Forms Stand	56.--

Please note that I only added chargeable features and please find the 277o configuration prices in your files.

With my best regards

G. Schoiswohl

Dr. G. Schoiswohl

GS/mr

3277/2
2813 POWER
2927 LANGUAGE
2703 UK. CHAR. GENERATOR
2958 UK. ENGISH FOR KEYB.
4690 KEYBOARD NUMERIC LOOK

6500
8200
2940
2940
20580

IBM WORLD TRADE CORPORATION
821 United Nations Plaza
New York, N.Y. 10017

AGREEMENT FOR PURCHASE OF IBM MACHINES

Name and Address of Purchaser: Agreement No.:

METRONEX
Al. Jerozolimskie 44
W a r s a w
Poland

Name and Address of User: Customer No.: 000100

ZOWAR
ul. Sniadeckich 8
W a r s a w
Poland

The Purchaser agrees to purchase, and IBM World Trade Corporation (IBM) by its acceptance of this Agreement agrees to sell, subject to all applicable laws and regulations and on the terms and conditions which follow, the machines and features (called machine or machines) listed below:

Item No.	Type	Model++	Description	Qty	Unit Price	Amount
					US $	US $
1.			Model Change from GOO to HOO on Type 2050	1		193,200.-- +
2.	2703	001	Transmission Control	1		73,080.--
		4619	IBM Terminal Control Base	1		998.--
		4696	IBM Terminal Control Type 1 165 BPS	1		1,706.--
		7505 ~~1~~ 6	Start Stop Base Type ~~1~~ 2	1		3,665.--
		2912	Data Line Set	2	3,392.-	6,784.--
		4878	Line Speed Option 134.5 BPS	1		499.--
		7506	Start Stop Base Type 2 600 BPS	1		3,665.--
		1440	Base Expansion	1		3,665.--

++) The model and specifications of the machine may be changed by agreement between IBM and the Purchaser

+) This price is for information only and is subject to confirmation.

Form No. N-04161/Pol/360

Item No.	Type	Model++	Description	Qty	Unit Price	Amount
					US $	US $
		4879	Line Speed Option 600 BPS	1		499.--
2816 POWER		7702	Synchronous Attachment	1		22.050.--
9043 COLOR		7715	EBCDIC Synchronous Terminal Control	1		4.410.--
9080 CABLING		7703	Synchronous Base Type 1	1		6.720.--
2927 LANGUAGE		2902	Synchronous Line Set	1		17.640.--
		7705	Synchronous Clock	1		2.730.--
		7711	1200 BPS	1		630.--
3.	3271	002	Display Control Unit	1		8.512.--
4.	3277	002	Display Unit	1		5.264.--
		4630	66 Key EBCDIC Typewriter Keyboard	1		672.--
	2	6350	Selector Light Pen	1		1.120.--
		6340	Security Key Lock	1		39.--
5.	3976	003	Modem 1200 BPS	2	2.940.-	5.880.--
6.	2772	001	Multi-Purpose Control Unit	1		12.732.--
		7705	Synchronous Clock	1		1.163.--
		8700	2213/2 Attachment	1		1.163.--
		8020	2502 Model A1 Attachment	1		2.795.--
		1910	Conversational Mode	1		240.--
		3650	EBCDIC Transparency	1		481.--
7.	2213	002	Printer	1		7.938.--
8.	2502	A01	Card Reader	1		6.356.--
9.	3976	003	Modem 1200 BPS	2	2.940.-	5.880.--
10.	2740	001	Communication Terminal	2	4.253.-	8.506.--
		3255	Dial Up	2	378.-	756.--
		2948	Automatic Disconnect	2	567.-	1.134.--
		1313	Automatic EOB	2	168.-	336.--
		6114	Record Checking	2	782.-	1.564.--
		9509	Pin Feed Platen	2	65.-	130.--

++) The model and specifications of the machine may be changed by agreement between IBM and the Purchaser.

Item No.	Type	Model++	Description	Qty	Unit Price	Amount
					US $	US $
11.	3976	002	Modem	3	2.483.-	7.449.--
12.	2740	002	Communication Terminal	2	6.510.-	13.020.--
		1499	Buffer Receive	2	347.-	694.--
		3600	Edit	2	656.-	1.312.--
		6114	Record Checking	2	782.-	1.564.--
		9509	Pin Feed Platen	2	65.-	130.--
		7106	Special Base 600 BPS	2	656.-	1.312.--
13.	3976	003	Modem	4	2.940.-	11.760.--
					Total	451.843.--

++) The model and specifications of the machine may be changed by agreement between IBM and the Purchaser.

Form No. N-04161/Pol/360

The above prices are those currently in effect. If IBM's established price for any machine upon the date of installation or forty-five (45) days after shipment, whichever occurs first, shall be lower than the price for such machine stated in this Agreement, the Purchaser shall have the benefit of such lower price. If IBM's established price for any machine shall be higher upon the date twelve (12) months prior to the scheduled shipping date, then the price of such machine stated in this Agreement shall be increased accordingly. In the event of an increase in price, the Purchaser shall have the right to cancel the order for such machine or to cancel this Agreement by written notice at least six (6) months prior to the scheduled shipping date.

The above prices are ex-source of supply. All charges for export casing and packing costs will be added to the above prices and paid by the Purchaser. If requested by the Purchaser, IBM will insure the machines during transit at the Purchaser's expense.

There shall be added to the above prices amounts equal to any taxes in the country of installation however designated, levied or based on such prices or on this Agreement, or the machines, including but not limited to taxes based on net income, state and local privilege or excise taxes based on gross revenue, and any taxes, fees or amounts in lieu thereof paid or payable by IBM in respect of the foregoing.

Any personal property taxes assessable on the machines after delivery to the carrier shall be borne by the Purchaser.

Terms

Ninety (90) days prior to the scheduled date of shipment the Purchaser will furnish IBM with a confirmed irrevocable letter of credit or guarantee of the

Bank Handlowy, Warsaw, Poland

covering the total amount payable in US Dollars in full and payable upon IBM's confirmation of installation or upon the date sixty (60) days after the equipment has crossed the border into Poland whichever first occurs, unless other payment terms have been agreed to by IBM and the Purchaser in an Amendment to this Agreement.

The Purchaser agrees to pay export casing and packing costs and any other charges or amounts as set forth above in full in Dollars upon IBM's confirmation of installation or upon the date sixty (60) days after the equipment has crossed the border into Poland whichever first occurs.

Failure to pay the purchase price of a machine or the above mentioned costs, charges or amounts when due shall give IBM the right, without liability, to avail itself of any legal remedy of which the first shall be invoking of any applicable bank guarantee.

Risk of Loss

Up to and including the date of delivery to the carrier, IBM and its insurers, if any, relieve the Purchaser of responsibility for all risks of loss or damage to the machines. After delivery to the carrier, the risk of loss or damage shall be on the Purchaser.

Delivery

Delivery will be made in accordance with IBM's established delivery schedule at the time of acceptance of this Agreement by IBM, subject to conditions beyond IBM's control. The method of shipment must be consistent with the nature of the machines and the hazards of transportation. The Purchaser agrees not to re-export the machines without IBM's prior consent.

Installation

Machines purchased under this Agreement will be installed and placed in good working order by IBM. The Purchaser shall make available a suitable place of installation with all facilities as specified in IBM's Installation Manual. The Purchaser shall furnish all labor required for unpacking and placing each machine in the desired location. The date on which the Purchaser is notified in writing by IBM that a machine has been placed in good working order and is ready for use shall be considered the date of installation of such machine for all purposes of this Agreement.

Warranty

I. Service and Parts

For ninety (90) days from the date of installation, or from the date sixty (60) days after the equipment has crossed the border into Poland provided the non-installation is caused by reasons or actions beyond IBM's control, whichever date first occurs, IBM will keep each of the machines in good working order and at the Purchaser's request, will make all necessary adjustments, repairs and parts replacements. All replaced parts will become the property of IBM on an exchange basis. This warranty will not apply if such adjustment, repair or parts replacement is required because of accident, neglect, misuse, failure of electric power, air condition, humidity control, transportation or causes other than ordinary use.

II. Parts

For one year from the date of installation, or from the date sixty (60) days after the equipment has crossed the border into Poland whichever date first occurs, IBM warrants each of the machines to be free from defects in material and work-

manship. IBM's obligation is limited to furnishing on an exchange basis replacements for parts (other than electronic tubes, crystal diodes or transistors) which have been promptly reported by the Purchaser as having been, in its opinion, defective and are so found by IBM upon inspection. This Parts Warranty shall apply only to the original Purchaser.

III. General

The use of the machines will be under the End User's exclusive management and control. The End User will be responsible for assuring the proper use, management and supervision of the machines and programs, audit controls, operating methods and office procedures, and for establishing all proper check points necessary for the Purchaser's intended use of the machines.

IBM will not be liable for personal injury or property, damage except personal injury or property damage caused by IBM's negligence. IBM shall in no event have obligations or liabilities for special or consequential damages. The Purchaser agrees that IBM will not be liable for any damages caused by the End User's failure to fulfil the End User's responsibilities set forth above.

Parts

The Seller offers the supply of parts for a term of at least ten (10) years from the date of acceptance of the respective system.

During this period of time the spare parts will be shipped in accordance with the following standard procedures of the Seller. For the order of the Purchaser's initial supply and regular periodic replenishment of the spare parts inventory a delivery term of 4 to 6 months applies, starting with the date on which the order has been received. If the spare parts inventory is well planned, the supply is thereby largely assured. In emergency cases the Seller makes his emergency service available. If a system or a unit is broken down, the Seller normally will deliver the part within 48 hours from receipt of a telex order in Vienna or Orly/Paris to the selected shipping agent. He will deliver it to the party having ordered it as quickly as possible (Emergency A). If a spare part is not in stock of the User but no direct system or machine break down is involved, the part will be delivered to the selected shipping agent within a maximum of 30 days from receipt of the order. Mostly such a delivery shall be effected sooner (Emergency B). For both emergency orders the delivery confirmation will be transmitted to the ordering party by telex.

Any changes of this standard procedure will be communicated to the Purchaser and User in good time.

Programs

IBM will make available to the Purchaser from its Program Libraries, without extra charge, in accordance with its established policies, IBM Type I, II and III programs relevant to the machines and the Purchaser's application.

Accessories, Engineering Changes, Program Testing, Cards, Tapes and Supplies

IBM will, upon request and to the extent permitted by all applicable laws and regulations, furnish to the Purchaser at IBM's established prices and terms prevailing at the time, any machines, attachments, features and engineering changes that IBM shall have available for sale and which may be suitable for use on, or in connection with, the machines. But IBM makes no representation that such machines, attachments, features or engineering changes which may be announced in the future, will be suitable for use on, or in connection with, the machines. IBM will also furnish to the Purchaser, upon request, at IBM's established prices and terms prevailing at the time, cards, tapes and other supplies used in the operation of the machines, as long as IBM has them available for sale. Pre-installation program testing is available for certain machines on terms prevailing at the time of testing.

Training

At the Purchaser's request, IBM will provide, at its standard rates and in accordance with its established policy then in effect, training in the maintenance of the machines for a reasonable number of maintenance engineers designated by the Purchaser.

Patents

IBM makes no representations or warranties regarding the patent status in Poland of the machines covered by this Agreement.

General

This constitutes the entire Agreement between the Purchaser and IBM with respect to the purchase and sale of the machines and no representation or statement not contained in this Agreement shall be binding upon IBM as a warranty or otherwise. The foregoing terms and conditions shall prevail notwithstanding any variance with the terms and conditions of any order submitted by the Purchaser for the machines.

Effective Date of the Agreement

The Agreement enters into effect upon signature by both parties after receipt of the necessary Export and Import Licenses and other Governmental permits.

If the necessary Export and Import Licence and other Governmental Authorizations which may be required by both parties are not obtained within 180 days from the date of signature, this Agreement will be deemed as not concluded.

The parties shall keep each other informed on a current basis of their respective efforts in obtaining the necessary licenses and authorizations. This deadline may be extended by common written consent of both parties for additional periods of one month each. Such termination of this Agreement will not give rise to any right or claim by either party against the other, unless it can be proven that one of the parties has been at fault.

Applicable Law and Jurisdiction

All disputes arising with this contract which cannot be settled by amicable negotiations between the partner shall be finally settled under the rules of arbitration of the United Nations Economic Commission for Europe by three arbitrators appointed in accordance with the rules which are known to the parties /Trade Working Paper dated August 27, 1965/.

The law governing this contract shall be the laws applicable in the Canton Basel City, Switzerland, the place of arbitration shall be Basel City, Switzerland.

Delivered to IBM _____

METRONEX
Purchaser

Al. Jerozolimskie 44
Street Address

Warsaw, Poland
City, State, Country

_____
By

_____
Officer's Title

Date _____

ZOWAR
End User

ul. Sniadeckich 8
Street Address

Warsaw, Poland
City, State, Country

Accepted by
IBM WORLD TRADE CORPORATION
821 United Nations Plaza
New York, N.Y. 10017

By _____

Date _____

Form No. N-04161/Pol/360

IBM

REGIONAL OFFICE, EUROPE CENTRAL AND EAST (R. O. E. C. E.)
IBM BUILDING - A 1021 VIENNA, OBERE DONAUSTRASSE 95

TELEPHONE: 24-36-36
TELEX: 07-5391
TELEGRAMS: INBUSROECE

inż. Bolek

Messr. Zowar
Att. Dir. Wisniewski

Zniadeckych 8
Warszawa

1017 paper tape reader 2520
1018 punch — " — 5.838
1255 magnetic char. reader 35.013

Warszawa Sept. 30th 71

1	2	7	3	2
	1	1	6	3
	3	2	6	6
	2	7	9	5
	1	1	6	3
		4	8	0
2	1	5	9	9

Dear Sirs,

With reference to todays discussions we should like to provide you with the following price information with regard to the teleprocessing system for Hydroprojekt. We are assuming that this terminal will be connected to a control unit installed on the 360/5o.

Unit/feat.	description	price(US$)
2772/1	Multi-Purpose Control Unit	12.732.-
8700	2213/2 Att.	1.163.-
8015	2265/2 Att.	3.266.-
8021	2502/2 Att.	2.795.-
7705	Synchr. Clock	1.163.-
4690	Keyboard Correction	240.-
3250	Formate Control	240.-
2213/2	Printer	7.938.-
2502/2	Card Reader	7.627.-
2265/2	Display Unit	5.929.-
3976/3	Modem (a US$ 2.940.-)	5.880.-
	Total	44.321.-

gdzie klawiatura

~~2278~~

44321
945
45266

3650 ~~8030~~ EBCDIC TRANSPARENCY 481 ~~693~~
1910 Conversational Mode 240
7950 Transmit - Receive Monitor Print ~~730~~ 967
RPQ Y 71786 kontakt ZOWAR 4.200 ?

5010 Multipoint link control. ⇐ multipoint

Σ 77.693 $

2312	Disk Unit	22.838.-
RPQ Y71786		4.200.-
		27.038

We hope that this information will assist you in your discussions. Due to the very short time that was available for the preparation, should any changes be necessary we shall inform you accordingly.

Very truly yours

G. Schoiswohl

Dr. G. Schoiswohl

IBM

IBM World Trade Corporation, 821 United Nations Plaza, New York, N.Y. 10017

Metronex
Warsaw
POLAND

KBI
Jasna 16
Warsaw
POLAND

[x] PROFORMA INVOICE
[ ] CUSTOMS INVOICE

Invoice Number	Invoice Date
820-CE-574/73	23 (day) 10 (month) 73 (year)

Agreement No.	Customer No.	Importer	BO

Shipped by: Date shipped: Delivery Terms: Your Order No.: Your Reference:

Quantity	Description	Unit Price U. S. $	Amount U. S. $
	CEM (Customer Engineering Memoranda)		
	INITIAL SET		
	Group 01 CEM Distr., General, Gen. EC-MLC, Safety, Tools		
	46 PS General		
	33 S 370 DIAG., OLTS		
	09 TP General, 3976 ECA, SA		
	12 3705, 3272, 3277, 3286		
	20 3505 ECA, 3525 ECA, 3505 - 3525 SA		
	21 2319 A ECA, 2314 SA		
	24 3420, 3803		
	34 1403 N1 ECA, SA		
	51 3135 ECA, SA		
	55 3046 ECA, 3215 ECA, SA		51.-
	11 Binders 59807		22.-
	ANNUAL SUBSCRIPTION 1973		
	Groups 01, 09, 12, 20, 21, 24, 33, 34, 46, 51, 55		102.-
	ERRORS AND OMISSIONS EXCEPTED gw IBM ROECE		175.-

Correspondence is to be directed to IBM ROECE Inc., A 1021 Vienna, IBM Building

IBM

IBM World Trade Corporation, 821 United Nations Plaza, New York, N.Y. 10017

Invoice to:

METRONEX

Warsaw
Poland

Shipped to:

K B I

Jasná 16
Warsaw
Poland

[x] PROFORMA INVOICE

[ ] CUSTOMS INVOICE

Invoice Number	Invoice Date (day month year)
820-CE-573/73	23/10/73

Agreement No.	Customer No.	Importer	BO

Shipped by: Date shipped: Delivery Terms: Your Order No.: Your Reference:

Quantity	Description	Unit Price U. S. $	Amount U. S. $
	PER DIEM ALLOWANCE for THREE engineers to be trained by IBM :		
	Training: As described in Pro-forma Invoice No. 820-CE-572/73 Dated October 23, 1973		
	Duration: approx. 11 1/2 months		
	Location: Paris		
	Living and Housing Allowance:		15.500,-
	The above allowance is based on a per diem rate of $ 20.- / day.		
	This allowance shall be ordered by the Purchaser by means of a written order or telex to IBM ROECE Inc., DP-CE Education, referring to this pro-forma invoice number. Acceptance of orders will be confirmed in writing or telex by IBM.		
	Charges will be invoiced monthly, payable within 30 days.		
			15.500,-

ERRORS AND OMISSIONS EXCEPTED
IBM ROECE INC.

Correspondence is to be directed to IBM ROECE Inc., A 1021 Vienna, IBM Building

IBM

IBM World Trade Corporation, 821 United Nations Plaza, New York, N.Y. 10017

Invoice to:
Metronex
Warsaw
Poland

Shipped to:
KDE
Jasna 16
Warsaw
Poland

[X] PROFORMA INVOICE
[ ] CUSTOMS INVOICE

Invoice Number	Invoice Date
820-5761	23 10 73 (day month year)

Agreement No.	Customer No.	Importer	BO
	3823.00		

Shipped by: Date shipped: Delivery Terms: Your Order No.: Your Reference:

Quantity	Description	Unit Price U. S. $	Amount U. S. $
	Transpotation charges for :		
	1xSystem 370/135 via Truck from Havant to Mainz		1.200.00
	1 x 3272, 1 x 3277, 1 x 3256 via Air from Greenock to Mainz		200.00
	1 x 3070 via Air from Montpellier to Mainz		25.00
	Total		1.425.00
	" Errors and Omissions Excepted "		
	" IBM ROECE INC.		
	The transportation charges were calculated based upon present valid source of supply and freight charges and miscellaneous costs presently in force. This forecast is an estimate.		
			1.425.00

Correspondence is to be directed to IBM ROECE Inc., A 1021 Vienna, IBM Building

IBM ROECE Inc. Vienna Branch, A 1021 Vienna, IBM Building

Invoice to:

METRONEX

WARSZAWA - POLAND

Shipped to:

K B I

Jasna 16
WARSZAWA - POLAND

[x] PROFORMA INVOICE

[ ] CUSTOMS INVOICE

Invoice Number	Invoice Date
82o-324 CS-Adm.	23 1o 73 day month year

Agreement No.	Customer No.	Importer	BO

Shipped by:	Date shipped:	Delivery Terms:	Your Order No.:	Your Reference:
airfreight		ex CO-Stock		

Quantity	Description	Unit Price U. S. $	Amount U. S. $
	Estimated costs for IBM System /37o-135 :		
	a) Spare parts, Set A, recommended as machine site set		3.000,--
	b) Tool and test equipment		28.000,--
	c) Costs for one year's use for maintenance parts, lubricant and cleaning material		12.000,--

ERRORS AND OMISSIONS EXCLUDED

IBM ROECE

FORM A 34-12/72

ATTACHMENT TO PROFORMA INVOICE No. 82o-324

The prices quoted are those currently in effect and are subject to change. The parts specified on the attached list are those currently recommended.

IBM sells spare parts, tools and test equipment only for use in the maintenance and repair of equipment purchased directly from IBM. It is our understanding that any spare parts, tools and test equipment ordered by you will be used only in the maintenance and repair of products manufactured and sold by IBM.

PAYMENT TERMS: Net cash 30 days after invoice date unless otherwise specified.

The minimum delivery time is approximately four months following receipt of an order by IBM.

Partial deliveries will be kept at a minimum.

IBM

IBM World Trade Corporation, 821 United Nations Plaza, New York, N.Y.100

Invoice to:

METRONEX

Al. Jerozolimskie 44
Warszawa 1, Poland

Shipped to:

ZOWAR
ul. Sniadeckich 8
Warszawa
Poland

[X] PROFORMA INVOICE
[ ] CUSTOMS INVOICE

Invoice Number	Invoice Date
820 - CE -571	23 (day) 10 (month) 73 (year)

Agreement No.	Customer No.	Importer	BO

Shipped by: Date shipped: Delivery Terms: Your Order No.: Your Reference:

Quantity	Description	Unit Price U. S. $	Amount U. S. $
	Field Installation of: 2913 x 3, 2912 x 3, 7705 x 1, 2902 x 1, 7505 x 1 in M/T 2703/001 Estimated Installation Date: 1974/1.Q The total price quoted includes all charges for labor, travel and living expenses and was calculated based upon presently valid installation times, hourly rates and travel costs. As such, this quotation represents an estimate of the actual charges to be expected at the time of installation, and is based upon installation during normal working hours. In addition it is assumed that all prerequisite engineering changes are installed in the machine. This installation service shall be ordered by the Purchaser by means of a written order or telex to IBM ROECE Inc., DP-CE Department, referring to this proforma invoice number. Acceptance of orders will be confirmed in writing or telex by IBM. Actual charges will be invoiced upon completion of installation, payable in 30 days. "Errors and Omissions Excepted" IBM ROECE INC.		5.372,-
			5.372,-

IBM ROECE Inc. Vienna Branch, A 1021 Vienna, IBM Building

[X] PROFORMA INVOICE

[ ] CUSTOMS INVOICE

Invoice to:

METRONEX

WARSZAWA - POLAND

Shipped to:

ZOWAR

WARSZAWA - POLAND

Invoice Number	Invoice Date
820-325 CS-Adm.	23 10 73 (day month year)

Agreement No.	Customer No.	Importer	BO

Shipped by:	Date shipped:	Delivery Terms:	Your Order No.:	Your Reference:
airfreight		ex CO-Stock		

Quantity	Description	Unit Price U. S. $	Amount U. S. $
	Estimated costs for IBM M/T 2703, 2740, 3275, 3284 and 3976		
	a) Spare parts, Set A, recommended as machine site set		2.500,--
	b) Tool and test equipment		5.000,--
	c) Costs for one year's use for maintenance parts, lubricant &. cleaning material		1.000,--

ERRORS AND OMISSIONS EXCEPTED

IBM ROECE

Correspondence is to be directed to IBM ROECE Inc., A 1021 Vienna, IBM Building

ATTACHMENT TO PROFORMA INVOICE No. 820-325

The prices quoted are those currently in effect and are subject to change. The parts specified on the attached list are those currently recommended.

IBM sells spare parts, tools and test equipment only for use in the maintenance and repair of equipment purchased directly from IBM. It is our understanding that any spare parts, tools and test equipment ordered by you will be used only in the maintenance and repair of products manufactured and sold by IBM.

PAYMENT TERMS: Net cash 30 days after invoice date unless otherwise specified.

The minimum delivery time is approximately four months following receipt of an order by IBM.

Partial deliveries will be kept at a minimum.

IBM

IBM World Trade Corporation, 821 United Nations Plaza, New York, N.Y. 10017

Invoice to:

METRONEX
Warsaw
Poland

Shipped to:

KBI
Jasná 16
Warsaw
Poland

[x] PROFORMA INVOICE
[ ] CUSTOMS INVOICE

Invoice Number	Invoice Date
820-CE-572/73	23/10/73 day month year

Agreement No.	Customer No.	Importer	BO

Shipped by: Date shipped: Delivery Terms: Your Order No.: Your Reference:

Quantity	Description	Unit Price U. S. $	Amount U. S. $
	TECHNICAL TRAINING of THREE engineers as per attached details Duration: 11 1/2 months, to be commenced by 1974/75 according to a class schedule to be provided by IBM at least sixty (60) days prior to the start of training. Location: Paris Tuition Fee:		135.290,-
	The tuition fee includes all costs of the training and training literature. Travel and living costs are not included. The prices stated herein are subject to change prior to acceptance by IBM of an order for the training described above. This training shall be ordered by the Purchaser by means of a written order or telex to IBM ROECE Inc., DP-CE Education, referring to this pro-forma invoice number. Acceptance of orders will be confirmed in writing or telex by IBM. Any changes in class schedules, course content or sequence, for reasons not attributable to IBM, may result in cancellation of any orders placed against this pro-forma invoice. The success of training provided will depend upon the User's selection of personnel to receive such training, and the diligence with which such personnel apply themselves during the training. Therefore, there is no express or implied guarantee regarding the result of training provided hereunder. Charges will be invoiced monthly, payable within 30 days.		
			135.290,--

ERRORS AND OMISSIONS EXCEPTED
IBM ROECE INC.

Correspondence is to be directed to IBM ROECE Inc., A 1021 Vienna, IBM Building

IBM ROECE Inc.

Vienna Branch
Obere Donaustraße 95
A-1021 Vienna, Austria
(Code 0222) 24 36 36
Cable address: Inbusroece
Telex ROECE AZ-7-53-91

ATTACHMENT TO PROFORMA INV. NO. 820-CE-572/73

dated October 23, 1973

1) Technical training of THREE engineers on IBM M/T :

1403, 3505/3525, 2319, 3420/3803, 3705 Hardware and Software

Duration: Approx. : 5 months
Location: Paris

2) Technical training of TWO engineers already trained as per above item 1), on:

3135 CPU, 3272/3277/3286.

Duration: Approx. 2 1/2 months
Location: Paris

3) Technical training of ONE engineer already trained as per above item 1), on:

Technical Software, PSI, OS, OS/ VS 1, OS BTAM, OS TCAM.

Duration: Approx. 4 months
Location: Paris

IBM World Trade Corporation, 821 United Nations Plaza, New York, N.Y.10017

Invoice to:

Metronex
Warsaw
Poland

Shipped to:

Zowar
Warsaw
Poland

[X] PROFORMA INVOICE
[ ] CUSTOMS INVOICE

Invoice Number	Invoice Date
820-5778	23 10 73 (day month year)

Agreement No.	Customer No.	Importer	BO
	0001.00		

Shipped by: Date shipped: Delivery Terms: Your Order No.: Your Reference:

Quantity	Description	Unit Price U. S. $	Amount U. S. $
	Features for Transmission Control Type 2703 Model 001		41.403.--
	Casing and Packing		25.--
45	Communication Terminal Type 2740 Model 001	5.977.--	239.080.--
	Casing and Packing	10.--	450.--
5	Display Unit Type 3275 Model 002	8.803.--	45.779.--
	Casing and Packing	16.--	80.-
5	Printer Type 3284 Model003	6.552.--	32.760.--
	Casing and Packing	15.--	75.--
90	Modem Type 3976 Model 001	2.258.--	180.640.--
	Casing and Packing	4.--	36.--
2	Modem Type 3976 Model 003	2.940.--	3.880.--
	Casing and Packing	4.--	8.--
	" Errors and Omissions Excepted " IBM ROECE INC.		
			544.216.--

IBM World Trade Corporation, 821 United Nations Plaza, New York, N.Y. 10017

Invoice to:
Metronex
Warsaw
Poland

Shipped to:
KBI
Jasua 16
Warsaw
Poland

[X] PROFORMA INVOICE
[ ] CUSTOMS INVOICE

Invoice Number	Invoice Date
820-5777	23 10 73 (day month year)

Agreement No.	Customer No.	Importer	BO
	3623.00		

Shipped by: Date shipped: Delivery Terms: Your Order No.: Your Reference:

Quantity	Description	Unit Price U. S. $	Amount U. S. $
2	Interchangeable Train Cartridge		
	Type 1416 Model 001	3.150.--	6.300.--
	Casing and Packing	8.--	16.--
1	Card Reader		
	Type 3505 Model B02		40.000.--
	Casing and Packing		42.-
1	Card Punch		
	Type 3525 Model P01		23.520.--
	Casing and Packing		37,--
1	Control Printer Keyboard		
	Type 3215 Model 001		9.408.--
	Casing and Packing		27.--
1	Display Control Unit		
	Type 3272 Model 002		9.632.--
	Casing and Packing		15.--
1	Display		
	Type 3277 Model 002		5.075.--
	Casing and Packing		8.--
1	Printer		
	Type 3286 Model 002		8.688.--
	Casing and Packing		15.--
1	Communication Controller		
	Type 3705 Model A02		124.714.--
	Casing and Packing		82.--
45	Modem		
	Type 3976 Model 001	2.258.--	96.610.--
	Casing and Packing		180.--
	" Errors and Omissions Excepted "		1.317.545.--

IBM ROECE INC

Correspondence is to be directed to IBM ROECE Inc., A 1021 Vienna, IBM Building

IBM

IBM World Trade Corporation, 821 United Nations Plaza, New York, N.Y. 10017

Invoice to:

Metronex
Warsaw
Poland

Shipped to:

KBI
Jasna 16
Warsaw
Poland

☑ PROFORMA INVOICE

☐ CUSTOMS INVOICE

Invoice Number	Invoice Date
820-5777	23, 10 73 (day month year)

Agreement No.	Customer No.	Importer	BO
	3823.00		

Shipped by: Date shipped: Delivery Terms: Your Order No.: Your Reference:

Quantity	Description	Unit Price U. S. $	Amount U. S. $
1	Central Processing Unit Type 3135 Model IOO		724.096.--
	Casing and Packing		40.--
1	Power Unit Type 3040 Model001		18.816.--
	Casing and Packing		28.--
1	Disk Storage Facility Type 2319 Model A01		44.979.--
	Casing and Packing		52.--
1	Disk Storage Type 2319 Model A03		44.979.--
	Casing and Packing		52.-
20	Disk Packs Type 2316 Model 001	550.--	11.000.--
	Casing and Packing	3.--	60.--
1	Tape Control Type 3803 Model 001		30.419.--
	Casing and Packing		38.--
4	Magnetic Tape Unit Type 3420 Model 003	19.914.--	79.656.--
	Casing and Packing	32.--	136.--
1	Printer Type 1403 N01		36.771.--
	Casing and Packing		55.--

cont'd

Correspondence is to be directed to IBM ROECE Inc., A 1021 Vienna, IBM Building

Alternative 3

A typewriter communication terminal with send and receive capability.

5x

2740 - 2	Communication Terminal	1	US-$	6.510,-
1495	Buffer Expansion	1		656,-
1499	Buffer Receive	1		347,-
3600	Edit	1		656,-
4510	Header Control	1		656,-
6114	Record Checking	1		782,-
9509	Pin Feed Platen	1		62,-
7106	600bp Speed Base			656.
			US-$	9.669,-

Total costs of Alternative 3 US-$ 44.713,-

7106 SPEED BASE 600 BPS
2832 MODEM ATT
2951 FOR TERMINAL TO MULTIPL. SYSTEM
2927 LANGUAGE
2813 POWER
2768 WORLD TRADE TERMINAL
9435 LINE FEEDING
9106 CHAR. SPACING
9571 PRINTING ELEMENT
9162 HOLE TO HOLE WIDTH

IBM

Equipex
Engineering - Representations
A-1060 Wien 6, Schadekgasse 18/I
Austria
Tel. (0222) 57 93 41, 57 01 96
Telex 12588

EQUIPEX

Appendix Nr. 1
to Contract Nr.: .....

closed between Messr. ELWRO - Foreign Trade Organisation

and Messr. EQUIPEX, Engineering-Representations, Vienna

I. MATERIALS TO BE DELIVERED AND PRICES:

MEMOREX COM-SYSTEM

A. Computer - Output - Microfimsystem (COM - SYSTEM)

1. Equipment:

				Price in US Dollars
No.1	1603	Microfilm-Printer		50.000.--
No. 1	1610	Developer		4.000.--
No.1	1620	Duplicator		7.000.--
No.1	1630	Previewer		800.--
No.6	1644	Viewers	a 650.--	3.900.--
No.1	1650	Viewer/Printer		2.500.--
				68.200.--

2. Spare parts:

As specified in Appendix Nr. 2 Total Value 5.737.50

3. Supplies:

As specified in Appendix Nr. 2 Total Value 5.461.50

Total COM - System 79.400.--

B. AGFA GAEVERT Camera
Modell COPEX SB 2
Index Nr. SB 2-U/4942/100 plus Film T 6.000.--

GRAND TOTAL 85.400.--

As a Special Discount (Trade Fair Discount) Equipex will supply a complete Airconditioning System for a Computerroom Type HIROSS DENCO "UNDER" consisting of
No.1 unit U 25 W
No.1 unit HARP

free of charge.

Equipex
Engineering - Representations
A-1060 Wien 6, Schadekgasse 18/I
Austria
Tel. (0222) 57 93 41, 57 01 96
Telex 12583

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The Airconditioning System is exhebited in Poznan and will be placed in Customs Bond at the end of the Poznan Trade Fair. At the time this contract becomes valid it can be picked up by the customer.

We ask you kindly to submitt as soon as possible the drawings and layouts of your computerroom so that the proper installation documantation can be provided and forwarded to you.

II. TERMS OF PAYMENT:

A. COM-SYSTEM:

against irrevocable letter of credit to be opened by an Austrian Bank.

B. Agfa-Gaevert System:

against irrevocable letter of credit according to the original amount of the original AGFA-Gaevert Invoice, which we will provide you with our invoice.

C. Airconditioning System:

gratis - free of charge.

III. GUARANTY and WARRANTY:

A. COM - System:

We guarantee that the 1600 microfilm system is plug to plug compatibel with the IBM 1403 printer and will function under the same operating system.

We warrantee the units to be free from defects in manufacturing and workmanship during a period of 12 months from installation. During this period we will provide free of charge replacement parts for any claimed items. Also, should a warrantee problem exist that cannot be solved by the trained technicians during the warranty period, a Memorex Engineer will be provided, free of charge within three working days of notification.

Expendables, such as fuses and lamps are not included in the abouve warranty. However, one set resp. one extra set of fuses and lamps will be provided with the equipment.

B. Agfa Gaevert - System: according to the Agfa Gaegert Offer.

C. Airconditioning System:

We guarantee the proper running of the plant for a period of 12 months from the commissioning till a maximum of 18 month from

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Engineering - Representations
A-1060 Wien 6, Schadekgasse 18/I
Austria
Tel. (0222) 57 93 41, 57 01 96
Telex 12588

EQUIPEX

the day of inforcement of the contract. The waaranty will be valid provided that all the maintanance operations as per our maintanance handbook will be strictly followed with particular referance to the cleaning of the filters and humidifiers, checking of freon leakages, oil charges and electrical controlls.

The wasranty will cover for the said period the components of our plant that will result defective or not properly running due to manufacturer's faults.

The piece will be completly replaced or repaired on our charge. The labour costs will be on our charge as well.

IV. TRAINING:

A. COM System:

1. Technical Training:

a. the technical training course would be scheduled for the 2nd half of august for 2 technicians over a three week period. The course will be conducted in Liege and/or Zurich.
b. The course would be divided into two weeks of theoretical studies and one week of practice and applications.

2. Applications Training:

a. The applications Training course would be scheduled for the 2nd half of August for one manager and one system analyst. It is expected that several locations will be utilised within Great Britain in Order to obseve several installations and real applications.
b. The course will alst for two weeks and will be conducted in Great Britain and Zurich.

The customer will pay for the flight to and from the relevant places (London, Brussels, Zurich) and Memorex will pay for all local transportationsosts, Travel and accomodation costs.

B. Agfa Gaevert System:

According to the Agfa Gaevert Offer

C. Airdonditioning System :

Your technicians will be trained in Warsaw by our Service-Contractors in Poland for the knowledge necessary to operate and maintan the system.

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Austria
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Telex 12588

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V. TIME OF DELIVERY:

A. MRX COM System:

immedeatly ex Poznan fair consignement stock after approval of export licences. (takes normaly 4 - 6 weeks).Costs of storages will be, untill approval of licences, on the side of the seller.

B. Agfa Gaevert System:

According to Agfa Gaevert qoutation.

C. Airconditioning System:

Ex Poznan Fair Consignement Stock at the date of enforcement of the contract.

VI. INSTALLATION:

A MRX COM System :

within 30 days of arrival of the goods at the customer computer site providing the preinstallation jobs like such as floor space, electrical outlets etc. will be ready. A complete set of installation documentation and proceedures will be sent to the customer within 30 days after receival of the order.

The instaallation of the Memorex CoM System will be done by Memorex custumer engineers and it is expected that this engeneer will be on the site for approx. 2 weeks.

B. Agfa Gaevert System:

According to Agfa Gaevert Offer.

C. Airconditioning System:

Installation will be done by our contractors in Poland.

for Elmo

Wien, 14.6.83

Memorex Ges. m. b. H.

1030 Wien
Gottfried-Keller-Gasse 2/16
Tel. (0222) 73 24 17
Telex 1-2734

MEMOREX

To
Director Trautmann
c/o ZOWAR

Snladeckich 8
W a r s a w a / PO dv/cm/39 1973 06 06

Dear Director Trautmann,

This letter is to confirm our verbal offer for training resultant to a contract between Zowar and Memorex for the purchase of a 1600 microfilm system and a 3660 disc drive system. The following details are to be added to our current offer:

I. COM TRAINING

a) Technical training

1) The technical training course would be scheduled for the 2nd half of August for 2 technicians over a three-week period. The course will be conducted in Liege and/or Zürich.
2) The course would be divided into two weeks of theoretical studies and one week of practice and application.

b) Applications training

1) The applications training course would be scheduled for the 2nd half of August for one manager and one systems analyst. It is expected that several locations will be utilised within Great Britain in order to observe several installations and real applications. Memorex will pay for all local transportation costs.
2) The course will last for two-weeks and will be conducted in Great Britain and Zürich.

MEMOREX

II. DISC DRIVE TRAINING

a) Technical training

1) The technical training course would be scheduled for the 2nd half of September for 2 technicians over a three-week period. The course will be conducted in Liege and/or Zürich.
2) The course would be divided into two weeks of theoretical studies and one week of practice and application.

b) Applications training

1) The applications training couse will be scheduled as appropriate during the Fall of 1973 for one manager and one systems analyst.
2) The course will be designed to give in-depth applications techniques and will last about two-weeks.

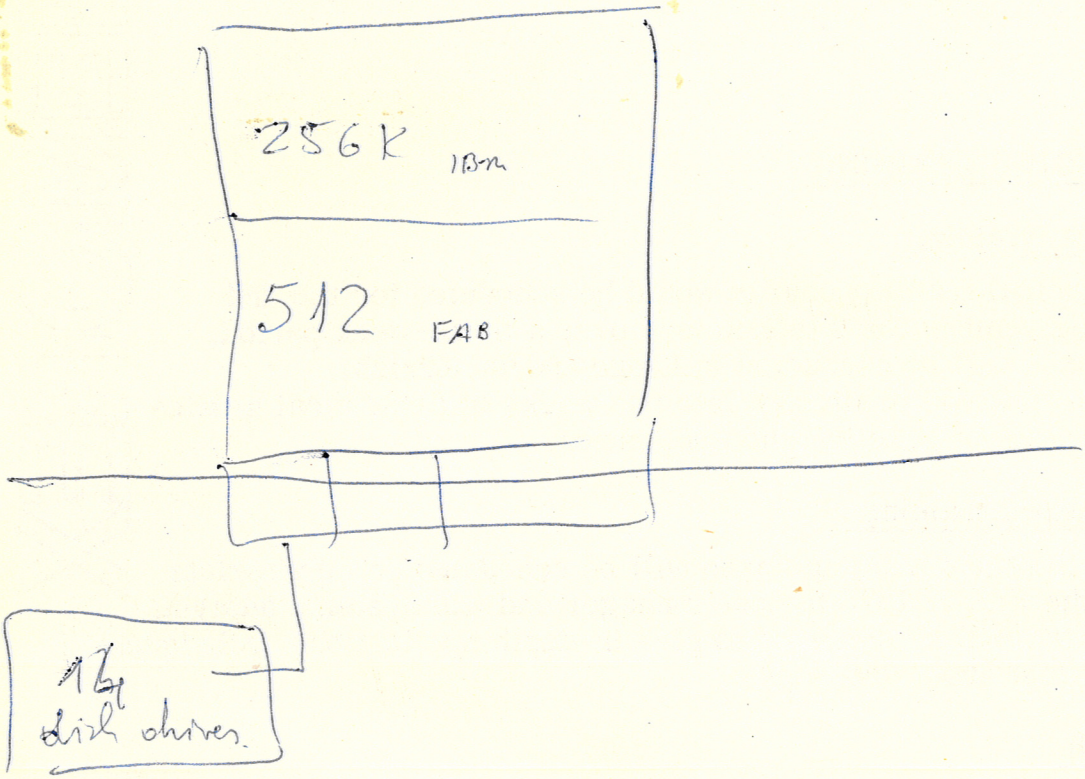
III. OTHER

a) The installation of the COM system and the disc drive system will be done by Memorex customer engineers during September/October.
b) Both peripheral systems are plug-to-plug compatible and require no changes in the IBM operating systems.

Enclosed please find a brochure for the MRX 40/50 computer.

Yours very truly

MEMOREX GES. M. B. H.
David R. Vincent


256K IBM
512 FAB
1G disk drives.

EC Level.

Engineering Change. 257084

prod. May 71

Mod: 128

Order No 17829 5/05

Type. MSA Size 128K

Stamping No C-1295

Array No

part no:

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Y 99-53
L 99-54
  99-55
N 99-56
C 99-57
  99-58
  99-59
  99-60
  99-61
C 99-62
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Y 99-93
L 99-94
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N 99-96
C 99-97
  99-98
* 99-99
END OF TEST
TURN COMP DISABLE OFF + PRESS START
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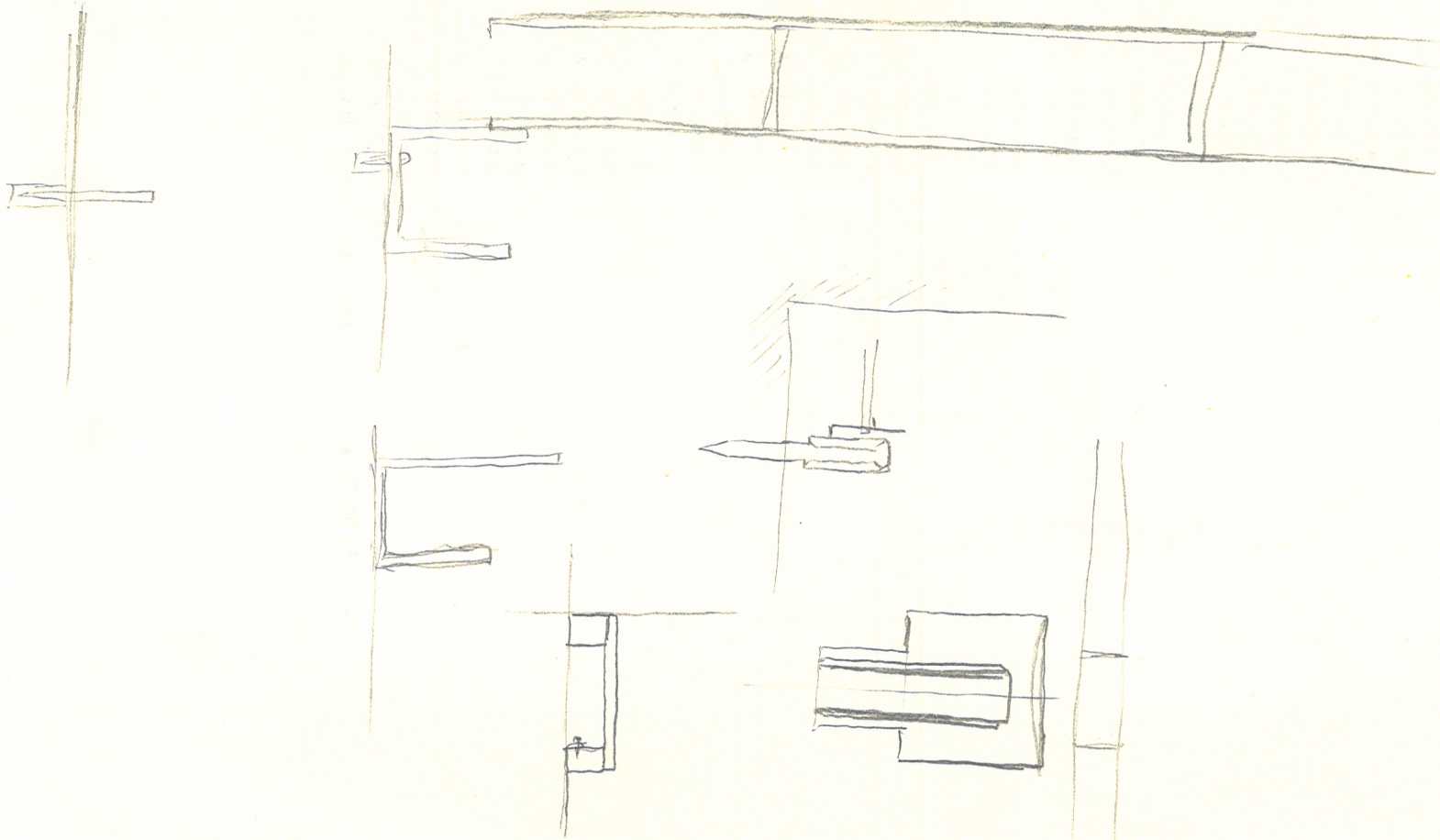
4F07B MUC OR TAR TEST
TURN ON COMPARE DISABLE SWITCH.



Janek Kwaśniewski

22 lata pracy

stary projektant automatyki kolejowej 5500 + 60% / bez punktu

wyk. wpisz inż. elektryk

CBS: PBK Hoża 63

tel: 21·08 – w 4062

→ 28·38·84

~~Dobre Miasto~~

~~list do Jakubowskich~~

ZONA

p. Kwaśna Agata

200-211

2776 w 2357

lub 4018

m
054295 hobal pl
813492 zowar pl

warszawa 1.06.1976.

zeto - zowar
telex nr 265

hotel ''bałtyk'' gdynia
ul. kielecka 2a
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uprzejmie prosimy o zarezerwowanie pokoju 2 osobowego w dniach
17 (17/18, 18/19, 19/20) - 20 (włącznie) czerwca dla
ob. wacława bellena.
prosimy o odwrotną odpowiedz

wacław bellen

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mom
nisestety brak n miejsc w tym terminie
054295 hobal pl

13492 zowar pl

051238 pl
813492 zowar pl
warszawa 31.05.1976.

zeto - zowar

telex nr 259

hotel ''orbis monopol'' gdansk
ul.gorkiego 1
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uprzejmie prosimy o zarezerwowanie pokoju 2 osobowego
w dniach 17 (17/18, 18/19, 19/20) - 20 (włącznie) czerwca
dla ob. wacława bellena.
prosimy o odwrotną odpowiedz.

bellen wacław

bardzo przepraszamy barak miejsc
m
dziękuje bardzo

051238 pl
813492 zowar pl

TELEX ~~054258~~

~~Hotel „Orbis Monopol" - Gdańsk~~ 051238
~~ul. Gorkiego 1~~

Nr. ~~259~~
Nr. 265

Uprzejmie prosimy o zarezerwowanie pokoju 2-osobowego w dniach 17 (17/18, 18/19, 19/20) – 20 (włącznie) czerwca dla ob. Wacława Bellena.

Prosimy o odwrotną odpowiedź.

31/05/76

telex Nr. 054295

Tj. Gdańsk
Gdynia
Sopot