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MFM Project

TERNOPIIL MOBILIZATION & MANAGMENT TRAINING TRIP REPORT

By
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Municipal Finance and Management
Project No. 5656
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Field Trip Report
TERNOPIIL MOBILIZATION AND MANAGEMENT TRAINING
Field Trip May 22 - June 6, 1994

Initial visit to Ternopil: May 26-27

Ternopil management training in Truskevets: May 29-June 1

Follow-up visit to Ternopil: June 1-3

Purposes of the trip:

The purposes of the trip were to participate in the management training of key Ternopil city managers, to initiate a working relationship with the mayor, counterpart and potential advisory committee members in Ternopil, and to make progress in mobilizing: establishing a project office, finding staff, locating advisor housing, etc. In addition, because Lviv city administration was making commitments to install a computer network, a meeting would be held with city officials to review the decision and its implications for future ADP developments under the MFM project.

Schedule of Activities:

May 22-23	Travel: Asheville to Budapest.
May 23-24	Meeting with Kennedy Shaw to discuss his two visits to Ternopil and his insights concerning municipal management issues in Eastern Europe and the NIS.
May 24-25	Travel: Budapest, Warsaw, Lviv.
May 25	Meetings with Anatoli Kopetz, Deputy Mayor, computer staff and Administrative Secretary in Lviv city administration concerning current computerization efforts of the city. Meeting with Cris and Kim Morrill re logistics.
May 26-27	Meetings in Ternopil with Alexandar Levchenko (project counterpart), Mayor Negoda, and other city officials concerning project start-up.
May 28	Meeting with Matt Glasser, PADCO. Workshop preparation.
May 29-June 1	Ternopil management training workshop in Truskevets participant list and workshop description are contained in a separate report by Jerry VanSant and Tom Armor).

- June 1-3 Meetings in Ternopil with city officials to discuss primary issues to be addressed during the MFM project, current status of reform efforts in city administration, and preparation for the computer needs assessment planned during July. Meetings with others to address issues of locating advisor housing, hiring initial office staff and setting up bank accounts. Survey of private sector resources for computer equipment, service and software development.
- June 4 Meeting with LIM concerning assistance with mobilization and handling administrative staffing of Lviv and Ternopil offices.
- June 5-6 Travel: Lviv, Warsaw, Asheville.

Observations and Results:

Lviv computerization: Lviv city has signed a purchase agreement with a Kiev Digital Equipment representative for installation of an optical fiber backbone and Ethernet network system in the city hall. The optical fiber cable has been installed. Although the cost of about \$20,000 is not major in terms of what is likely to be the MFM project computerization investment, this element will have to be integrated into the design of the overall system ultimately developed. DEC has provided detailed specs for an Alpha processor based server to run the network which would require an additional \$30,000 plus. A request was made that the city delay a decision on the server until we can do an assessment and develop an information system plan.

There has been no needs assessment - a study by the Polytech appears to be a requirements analysis assuming that the major task is simply installing a network. The concept of a systematic process of information system development does not appear to be familiar to either the small (2 persons) computer department or to managers. The motivation for the current equipment acquisition is partially election related pressure from the mayor as well as a desire to have a common database for all departments. However, no evaluation has been made of what data can or should be shared, or what tasks would be enhanced by a city wide information network.

The visit was too brief to assess present use of about 20 PC's, but inquiries to Canadian volunteers working with the city suggest that many current machines are not used intensively.

The importance of following an orderly and well planned information system implementation was emphasized in briefings with the Deputy Mayor, Mr. Kopetz and with the Computer Center staff. The upcoming assessment in July will provide a framework for automation implementation and gather data needed for automation planning. The city has been asked to provide information which will be translated by LIM prior to arrival of the assessment team (Annex 1). During the assessment visit, a seminar will be given to top managers on computerization in local government emphasizing what is required for successful implementation and what has been the experience in US city governments with computerization.

Ternopil computerization: Although not explicitly planned for this trip, there was an opportunity to make an initial scan of current computerization in Ternopil and the local environment for ADP development and support. Ternopil has an active computer department with a three person staff who maintain and support about 21 current PC users (see Annex 2). Bookkeeping and word processing are the primary applications; the water company is generating payroll on computer. However, budgets and financial analysis are prepared manually. There is little evidence of management information prepared on computer. Computers appear to be used principally as enhanced adding machines and typewriters, not as tools supporting a management information system.

At least one group of programmers and system developers is active in Ternopil as a nascent private business. A hospital patient record keeping system and a regional hospital communications network implemented by this group were visited. Both appeared to be very competent and well developed applications running on PC's and clearly in active use. Email and other Internet services are available in Ternopil. Email messages to the US were successfully sent and received. The National Bank of Ukraine office in Ternopil is fully computerized using a Novell network and is linked to regional branch offices and Kiev via modems.

As in Lviv, the major initial MFM contribution should be assistance to perform a systematic needs assessment and develop an information system plan which will support overall reform of the city's financial and management functions.

Ternopil's major areas of focus: At this early stage, the most active areas of interest are:

organizational structure of the city - reforms are already underway, the reduction of the city council from 127 members to 16, for example. It is recognized that the current framework needs reform, particularly as responsibilities change through privatization and changing intergovernmental relations. There is a great interest in how US local government works and is organized.

economic development - the city now is the owner and operator of a wide range of businesses (called public services and including retail stores, hair dressers and other services as well as water, transportation, education, health, housing, etc.) What should be the role of the city in the local economy as privatization occurs? Establishing an office of economic development to promote the Ternopil region and to facilitate foreign and domestic investment is of great interest. They are aware that US local governments often have an active role in economic development. The major industries in Ternopil are now virtually shut down due to the loss of what had been primarily military electronics sales to Russia.

budget development and financial management - how to plan and to manage revenues and expenditures is of interest and is an area already undergoing reforms. The current year's budget was generated from departments upward (managed by the Economics Department), then negotiated with the Finance department (the source of funds) and the Oblast. The complex municipal organization structure where responsibilities for related functions seem dispersed over several departments, makes budgeting much less transparent than it could be; the lack of control over the revenue side is frustrating, but in Ternopil there appears to be a good working relationship between the Oblast finance and city finance and economics departments. The Oblast finance manager attended the Truskevets training.

water supply and transportation are two services with high priority. The water department appears to be well managed, the problem is lack of adequate financial resources. The large local industries that traditionally have been taxed heavily to support these systems are no longer able to provide revenue.

MFM goals are to provide better public services through assisting cities implement improved finance and management practices. However, the immediate primary limitation in public services such as water and public transportation is lack of funds for operation, maintenance and capital investment. While user fees should be increased to better cover the costs of service, users need to have the ability to pay higher charges. The economic development required to produce higher incomes will require time. However, essential public services have to be continued. Moreover, additional capital investments such as individual water meters will be needed both to implement better cost recovery and to improve system performance. Coupling sources of short-term operational and capital investment funds through a donor funded project, to implementation of reformed management and financial practices would benefit both MFM project goals and those of an infrastructure improvement project. In the absence of infrastructure maintenance and improvement funds, there is a risk that the MFM project will be perceived as irrelevant. For example, a well developed parts inventory system for public transportation equipment maintenance will not have much impact if there are no spare parts to manage.

Next steps in Ternopil:

Advisory Committee: Once the election is over (June 26), the advisory committee will be appointed. The expectation is that the current mayor will be elected and that most of the current top managers will be retained.

Study Tour: The mayor visited Asheville NC in November 1992 and Ternopil has a copy of Asheville's Strategic Plan to the Year 2010, as well as the 1993 city budget. Various city officials have been studying these documents as an example of how US local government operates. They brought them to the Truskevets training and a lively evening discussion ensued around Asheville's organization and budget "pie" charts. Asheville is also the home of the LTA to Ternopil. Given this background it is suggested that Asheville be considered for inclusion on the Ternopil study tour. Additional material about the city will be obtained so that when the tour participants arrive they will be well prepared to focus on their specific areas of interest.

Work Plan: The Truskevets training was a good introduction to work plan preparation - the Ternopil group came up with a vision statement, a number of specific objectives and several strategies for achieving these objectives. Work on documenting the current organizational structure and current practices has begun and should continue. This information is needed to establish a base line and for planning what reforms and systems development work will take place under MFM.

Logistics: Obtaining qualified staff, suitable housing for the LTA, and establishing the MFM office will require the assistance of LIM. Ternopil is a relatively small city and has not hosted foreign advisors. LIM has been requested to provide logistics services for Ternopil as it has for Lviv (Annex 3). In addition, an agreement is being drawn up for the hiring of MFM office administrative staff for both Lviv and Ternopil through LIM. This will eliminate the problems of dealing with Ukrainian employment law and practices for the interpreters and office manager/administrative assistant positions. LIM will find and screen candidates but the LTAs will make the final selection. LIM will employ the selected candidates and be reimbursed on a regular basis by the project.

ADP assessment: The ADP assessments for Ternopil, Lviv and Kharkiv are scheduled for July. Lviv and Ternopil's assessment will have to take place prior to the Lviv study tour starting on July 17. Both cities have been asked to prepare organization charts of key departments, flow or step charts for major tasks in these departments, and a library of forms used. These items will be translated and ready for the assessment team.

BRIEFING FOR RTI CONSULTANT
COMPUTERIZATION OF THE CITY OF LVIV

May 15, 1994

Organization and History of the Computer Section

- In 1987, an agreement was signed between the City and the Polytechnic University of Lviv for a local computer network in City Hall.
- In February 1994, an Information Department was created under the Secretary of City Administration.
- The Computer Section is in the Information Department.
- The approved staff for this section is as follows:
 - 1 Deputy Head of Section
 - 4 Network Administrators
 - 3 Programmers
- At this time only two of the above positions have been filled.

Equipment and Physical Assets

- Since 1987, the following equipment has been purchased

ITEM	NUMBER
Star NX-500 Printer	20
Epson FX-1050 Printer	2
Kanda 100-300	1
IBM Computer	1
386/57/25/3.40/SVGA	8
386/33/25/3.60/SVGA	10
386/DX/33/4/120/SVGA	2
386/DX/40/4/120/SIC	1
486/DX/33/8/510/1	1
HP LASERJET LIP+	1
MODEM MNP-5	

- Upon approval of the computer network agreement, the following additional equipment was purchased.

ITEM	NUMBER	TOTAL PRICE
DECHub parts		
PACK OF DETMP-HA, DEHUB-CC, EUR	4	\$12,012
BRIDGE PORT, N405, FOR HUB, DDC	1	2,191
DECrepeater 205A, Docs, No Pw	1	650
PWR CORD FOR LANG CENTRAL DUB	4	44
Labeling path DECHub-FC		
Power Panel Kit w/bracket	4	244
CI-1011-01 Scratch Relief Bar	4	120

including: twisted pair cable, thinwire, chiswire, and fibre optic cable.

* choice of the carrier is critical.

Current situation is as follows:

- 4 floors with corridor perimeter of 200 m. each
- external perimeter of 200 m.
- open courtyard
- distance between floors of 5 m.

- possible environments:

A. Computer network on the basis of thick coaxial cable.

B.1. Computer Network on the basis of thin coaxial cable.

B.2. Improved on basis of thin coaxial cable

C. Network on the basis of twisted pair and fibre optic cable.

** Option C has the most benefits and is the most expensive

- fairly fast facility to expand network and attach equipment
- in the transition to a faster network, FDDI, the investment in connecting cables will be preserved

Workplan to Complete the Computer Network

-- It is planned to use an existing IBM PC/AT 486 for the File server and UNIX Free BSD for the network operating system.

-- In the future, the City must acquire a powerful file server which meets the following criteria:

- * disc space which can be shared by all users on the system:
 - uninterrupted usage
- * adequate speed with simultaneous users (20 in the first phase);
- * potential growth of disc space; and,
- * price.

-- Important to have a server with a math processor to use information retrieval system (e.g. Oracle, Informix, Rdb).

-- This server must have:

- * an effective multi-task operating system;
- * a large operating memory;
- * high speed; and,

Blank Snap-in Insert	1	80
UTP 8MJS110 for H310G-PA/PB	6	254
17-03212-02 6MP-6MP PATCH CBL	30	210
17-03212-05 6MP-6MP PATCH CBL	10	130
17-03212-04 6MP-6MP PATCH CBL	10	120
17-03212-07 6MP-6MP PATCH CBL	10	110
17-03070-01 PVC WIRE REEL 1K	1	270
INTERNAL DISCONNECT WALLBOX	1	165
PUNCH DOWN TOOL, 110 TYPE	1	131
32-01021-01 8MO JACK W 110 PD	4	120
E/P, 86X86, WHT, DIGITAL/10	1	34
25X50MM RJ/S INS. (T.WR) (10)	1	60
SINGLE WIDTH MODULE, WHT/10	1	42
ThinWire DEChubs Connection		
THINWIRE PVC SPOOL 1000 FT.	1	209
BNC CONNECTOR (MALE) THINWIRE	8	24
THINWIRE CRIMP & DIE FOR BNC	1	105
Etherworks controllers		
EtherWorks 3 TURBO TP	2	402
Fiber Stuff		
FIBER CONDO PATCH, SPLICE, ST	2	402
QTY 12 BLPHO COUPLER FOR 2.5M	1	141
DISCONNECT 2.5MM BAYONET FIBR	2	108
F/O CBL ASSY DUAL 2.5MM BAYON	2	192
Fibre Optic Cabling		
HEAVY DUTY FIBRE OPTIC 10MM	15	1,095
Value Added Services		
ENGINEER TERMINATE & TEST	1	700
		<hr/>
TOTAL PRICE		\$22,425

-- To complete network installation, it is necessary to:

- * exchange Ethernet adaptors for Etherworks TP adaptors or purchase Etherworks TP;
- * obtain a network operating system; and,
- * obtain network program.

Justification for Choosing Network Topology

-- General: high speed transmissions
part one of several buildings

-- Goal: share data
optimize use of expensive equipment
set up data bases

-- Very Common Standard: IEEE 802.3/Ethernet

- * need information exchange of 10 Mbyte/sec.
- * need open system
- * LAN 802.3 Ethernet can use various carriers.

* appropriate price.

-- The possible options, include:

HP: HP9000 - 5000/140
DEC: DEC 3000 - 100 AXP Server
SUN: SPARC Server 10
IBM: AS400 - E70

-- The following issues must be taken into consideration:

- * the most popular operating systems for administrative environments are VMS and UNIX compatible;
- * HP and SUN are generally oriented for use of UNIX (HP-UX and SUN Solaris);
- * DEC uses open VMS and UNIX-OSF/1
- * IBM has its own OS/400

-- SUN and HP build servers on multi-processing platforms. Their quality in the future will not be improved.

-- DEC is building its desktop system uses only on one processor architecture. This is possible due to the new microprocessor Alpha which allows for an increase in processing speed to 400 Megahertz. These capabilities of the microprocessor Alpha allow the use of very powerful operating systems OSF/1 and Windows NT.

** Therefore, these factors lead to the favorable consideration of the AXP Server.

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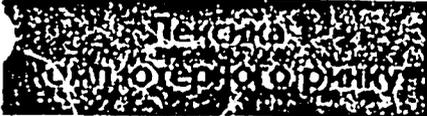
Table with columns: Model AT/PC, Price, Price with tax, Company, and detailed specifications. Includes various PC models like 386, 486, Pentium with different configurations and prices.

Ціни на принтери та оргтехніку у Львові на 20.05.94

Table with columns: Printer/Device, Price, Price with tax, Company, and specifications. Lists various printer models like Epson, HP, and Kyocera with their respective prices.



(0322) 72-10-59



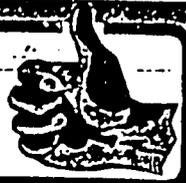
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July 2, 1994

TO: Gordon Cressmen
RTI

CC: HJR, ERIC, DG

FR: Paul Hoover
MFM Project, Ternopil LTA

RE: Computerization needs assessment in Ukraine

First off, thanks for being willing to join me on the assessments in Lviv and Kharkiv. I appreciate how difficult it is to go from one short-term assignment to another with little recovery time. I have enclosed the trip report from my first trip to Lviv and Ternopil along with some data on the status of computerization in the two cities and an ad showing prices for PC equipment in Lviv.

Our tasks during the assessment visits seem to me to be the following - please feel free to add or adjust based on your experience:

1. Identify and document current ADP/MIS resources in each city: equipment, software, applications, human resources.
2. Identify and evaluate local sources of equipment and services: hardware, software, programming, systems analysis, computer training.
3. Identify potential high priority applications emphasizing financial applications, but looking broadly at MIS needs and opportunities.
4. Assist municipal managers with setting ADP/MIS priorities - we want to have one or two high priority application candidates for requirements analysis.
5. Obtain a preliminary idea of the appropriate platform, architecture and likely scale of the system(s) to be installed and supported under MFM.
6. Generate a list of equipment and software to be procured as the starter set for initial computer training, determine where that equipment will be located, and how it will be integrated into the major application system.
7. Leave behind in each city a set of tasks to be performed in preparation for the requirements analysis which will follow the needs assessment.

This is a lot of work to accomplish in the short period we have, especially in Lviv. Fortunately, all the LTA's will be in place by August and can help follow-up what we get started.

I'd like to leave a copy of Visio with each city to use for organization and flow charts. I think the templates that come with the standard system would be adequate to begin with. I'll request that three copies be purchased and hopefully they will be available when you get back from your vacation and you can bring them with you.