**SPECIFICATIONS FOR
HARDWARE/
SOFTWARE
PROCUREMENT**

**USAID SMALL GRANT
PROGRAM**

**MUNICIPALITY OF
VIDIN, BULGARIA**

Prepared for

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TABLE OF CONTENTS

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INTRODUCTION

The purpose of this document is to formalize and specify the requirements of computer hardware, software and consulting services for the Municipality of Vidin under the terms of the Small Grant Program, as part of the Local Government Initiative (LGI).

This program, which is funded by the United States Agency for International Development (USAID), will provide the funds for the acquisition of goods and services to improve the level of services provided by the Municipality to its citizens.

The hardware, software, and service specifications set hereby have been prepared as part of the Program to Improve Financial Management Information System of the LGI Work Plan for the Municipality of Vidin.

The consultants, in conjunction with Municipal Information Technology (IT) managers, have agreed to a list of computer hardware, software, and consulting services that will be required to implement the first phase of an Financial Information Systems Development, including:

— The upgrade of the current municipal computer network capacity.

The total cost of the program is estimated at US$ 50,000. This total cost can be broken down into the following components:

— Computer Hardware US$ 41,000; and
— Computer Software and Consulting Services US$ 9,000.

The utilization of the funds provided by the Small Grant Program to finance the upgrade of the computer hardware infrastructure and implement the first phase of a municipal Financial Management Information System, is part of the overall efforts of the Municipality of Vidin to improve its operational and management capabilities.

The computer equipment, software and consulting services requested here have been determined and specified under the general direction of a municipal Information Systems (IS) Master Plan for improvement of IS for the Municipality.

Note: In the event that the computer software and consultant services cost exceeds the amount of $9,000, the item corresponding to the number of workstations will be reduced proportionally. If the funds provided by this line item are more than enough, the number of workstations will be increased proportionally.

OBJECTIVES

The Municipality wishes to improve the operational environment—install backup devices, improve network equipment—and to create the foundation for future upgrade and expansion of its existing computer system. It also wishes to create documentation and archiving systems and improve its financial management processes by developing new applications for finance and accounting systems. These objectives are going to be reached through the following steps:

! Provide better computer support and connectivity to the municipal employees. The existing computer system infrastructure and its local area network backbone are old, obsolete, and have a very limited capacity. Most of the computers can barely support the existing software applications. Many workstations have minimal hard-disk drives to allow flexibility and computer power at the desk-top level. The network server does not have an appropriate backup device for securing the work performed across the network. Because many of the software applications that run on the municipal network have direct impact in the services provided by the Municipality, better computer support for its users will benefit the citizens of Vidin.

! Provide computerized support in Financial and Accounting Departments of the Municipality, as this is one of the most important areas of its management activities. As the condition of existing automation and control is inadequate and as the accounting system available does not provide timely reports, this system should be replaced with a more efficient one.

! Provide computerized support in the documentation tracking and archive processing of all incoming, outgoing and inter-municipality documentation turnover. The number of documents received in the Municipality is normally 5,000-6,000 pages per year and this does not include outgoing and internal documentation.

! Provide training for the staff of the Municipality. This is essential, as most of the Municipality staff are not trained to work with computers.

With the implementation of this plan, the Municipality will be able to create the necessary environment to better absorb and implement computer technology.   In the long run, by accomplishing these short-term objectives, the Municipality should be able to implement a Management Information System and consequently deliver better services to its citizens.

HARDWARE REQUEST

The hardware required to implement the first phase of the Management Information Systems consists in brief of one network server, twelve computer workstations, two printers, and one scanner. The overall cost estimate is $41,000, including all local taxes.

Additional equipment and basic training required to implement this plan will be acquired by the municipality with its own resources.

The server, six of the workstations and one of the networked printers will be used exclusively for developing the Accounting and Financial activities and implementing the Financial Management Information System (FMIS).
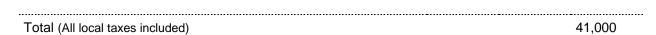
For the improvement of the documentation tracking and archives, two workstations and one of the networked printers, will be used.

The remaining computers will be used for the overall improvement of the municipal infrastructure for legal, ESGRAON, and other systems.

The following table is a summary review of the computer hardware required to be funded by the Small Grant Program, including cost estimates for each component. The complete specifications of the computer hardware are attached as Appendix A.

Table 1
Hardware Request Summary[*]

Product	Purpose	Quantity	Unit Cost US$	Extended Cost US$
Network Server	Upgrade current network server	1	12,000	12,000
Workstations	Update the current hardware network environment and create the infrastructure for the future FMIS	12	2000	24,000
Laser Printer A4 8 ppm	Create the infrastructure for the FMIS	1	1,500	1,500
Laser Printer A4 12 ppm	Update current network environment	1	1,500	2,000
Scanner A4	Create the infrastructure for the documentation and archive structure	1	1,500	1,500

Total (All local taxes included)	41,000

Note: This table presents estimated costs of hardware equipment. Prices may vary.

SOFTWARE REQUEST

To complete the improvement of the Municipality's Management Information System (MIS), the next step following the definition of hardware specifications is to acquire relevant software, which meets the needs of the Municipality and provides a platform for future development and upgrade. The software should meet the following requirements:

— Meet Bulgarian Legislation requirements and standards;
— Work in Bulgarian Language;
— Be compatible with computer systems available in the Municipality;
— Have a user-friendly interface; and
— Be modular and flexible for changes and future upgrades.

The software requested is:

! Accounting and Financial Systems should provide forms and reports in the format required by the Ministry of Finance and Bulgarian Laws and Regulations, and to give more flexibility to create custom-defined reports.

! Documentation tracking and archiving system — for improvement of the productivity if the Municipality, which will have an effect in the overall improvement of the services provided to citizens and organizations.

Table 2
Software Request Summary*

Product	Purpose	Quantity	Unit Cost US$	Extended Cost US$
Documentation and Archiving System	Documentation and Archiving System	1	1,000	1,000
Office administration package	Overall improvement of office activities	1	1,400	1,400
Total (All local taxes included)				2,400

Note: This table presents estimated costs of software. Prices may vary.

CONSULTANCY SERVICES AND TRAINING

Consultant services and training will be provided by software developers or by external independent consultants. The cost is about $6,600. These services will be used for :

— Training of municipal staff;
— Development of new applications for improvement of the MIS performance; and
— Enhancement of existing software to improve performance.

The cost of training and consultant services is an estimate and may vary.

APPENDIX A

COMPUTER HARDWARE SPECIFICATIONS

The specifications that follow correspond to the computer hardware and software to be funded under the Small Grant Program.

PRODUCT: MAIN NETWORK SERVER

Purpose: Upgrade current network server
Quantity: One (1) unit

Specifications by Component

Component	Specification
Processor	• Minimum Speed: 166 MHZ
Memory	• 32 MB of RAM installed, expandable to 128 MB • 512 KB Cache Memory • 4GB Hard Disk Drive • 3.5 inch Floppy Disk Drive
Screen and Graphics	• 14 inch color monitor .28 dpi • 1 MB RAM
Keyboard and Mouse	• 101-104 keys Latin/Cyrillic Keyboard • 3 button Mouse
Backup and Restore	• 4 GB Digital Audio Tape Drive (4 millimeters) • Backup scheduling software • 4x speed internal CD-ROM Drive
Networking & Communications	• LAN adapter • Network Hubs - Total 36 ports
Backup Power	• 600 VA Power Supply (UPS) • UPS with 1 hour minimum period of power supply
Application Software	• Utilities: Anti-virus, UPS Management Software, Backup Scheduling Software

PRODUCT: CLIENT WORKSTATIONS

Purpose: Update the current hardware network environment and create the infrastructure for the future Financial Management Information System (FMIS)

Quantity: Twelve (12) units

Specifications by Component

Component	Specification
Processor	• Minimum speed: 120 MHZ
Memory	• 16 MB of RAM installed • 256 KB Cache Memory • 1 GB Hard Disk Drive • 3.5 inch Floppy Disk Drive
Screen and Graphics	• 14 inch color monitor .28 dpi as minimum • 1 MB Video RAM • Enhanced video adapter
Keyboard and Mouse	• 101-104 keys Latin/Cyrillic Keyboard • 3 button Mouse
Networking	• LAN Adapter
Application Software	• Utilities: Anti-virus software, Backup software, etc.

PRODUCT: LASER PRINTER (a)

Purpose: Update the current hardware network environment and create the infrastructure for the future Financial Information System

Quantity: One (1) unit

Specifications by Component

Component	*Specification*
Resolution	• 600 x 600 dpi • 120 levels of gray at 106 lines per inch
Typeface Capabilities	• 35 scalable fonts built-in • Additional 75 scalable fonts (True type)
Paper Handling	• 250-sheet universal cassette • 100-sheet (or 10-envelope) multipurpose tray • 100-sheet face-down top output tray • 100-sheet face-up rear output tray
Media Type	• Plain paper and Envelopes • Transparencies • Card stock • Postcards and labels
Media Size	• A4 (210 x 297 millimeters) • Letter (8.5 x 11 inches)
Print Speed/Throughput	• 8 pages per minute
Memory	• 3 MB standard, 3 unused SIMM slots • 50 MB maximum
Input/Output Interface	• Bi-directional, IEEE-1284 compliant parallel ports • IrDA-compliant wireless infrared port
Operating Environment	• Temperature: 5C (41F) to 40C (104F) • Relative Humidity: 10 to 80 percent non-condensing

PRODUCT: LASER PRINTER (b)

Purpose: Update the current hardware network environment
Quantity: One (1) unit

Specifications by Component

Component	Specification
Resolution	• 600 x 600 dpi • 120 levels of gray at 106 lines per inch
Typeface Capabilities	• 35 scalable fonts built-in • Additional 75 scalable fonts (True type)
Paper Handling	• 250-sheet universal cassette • 100-sheet (or 10-envelope) multipurpose tray • 100-sheet face-down top output tray • 100-sheet face-up rear output tray
Media Type	• Plain paper and Envelopes • Transparencies • Card stock • Postcards and labels
Media Size	• A4 (210 x 297 millimeters) • Letter (8.5 x 11 inches)
Print Speed / Throughput	• 12 pages per minute
Memory	• 6 MB standard, 3 unused SIMM slots • 48 MB maximum
Input/Output Interface	• Bi-directional, IEEE-1284 compliant parallel ports • IrDA-compliant wireless infrared port
Operating Environment	• Temperature: 5C (41F) to 40C (104F) • Relative Humidity: 10 to 80 percent non-condensing

PRODUCT: SCANNER

Purpose: Update the current hardware network environment and create the infrastructure for Documentation and archiving system

Quantity: One (1) unit

Specifications by Component

Component	*Specification*
Scanner Type	• Flatbed, color and gray scale
Scanning Mechanism	• 1 pass
Resolution	• Enhanced: 2400 dpi • Optical: 600 dpi
Grayscale	• 10-bit (1,024 grayscale levels)
Color Recognition	• 30-bit (more then 1 billion colors)
Scanning Speed (scan time only; data transfer not included)	• Preview: 4 seconds • 300 dpi B/W, letter: 7.5 seconds • 300 dpi color, letter: 7.5 seconds
Scaling	• 3 - 400 percent in 1 percent increments at 600 dpi (scaling range depending on resolution)
Maximum Document Sizes	• A4 (210 x 297 millimeters)