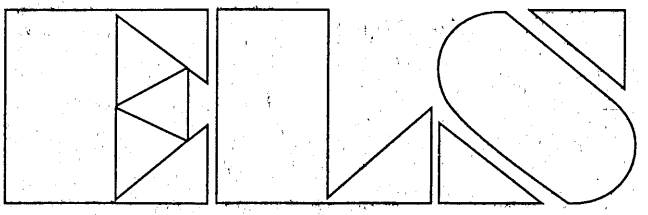


Electronic Licensing Systems for the Minnesota Department of Natural Resources

Submitted by the Minnesota Department of Natural Resources License Bureau
January 2000

1999 Minn. Laws Chap. 231
Sec. 5

Contents

Introduction

The Minnesota Department of Natural Resources (DNR) is developing and implementing an Electronic Licensing System (ELS) for hunting, fishing and recreational vehicle licenses and registrations.

The 1999 Legislative Session of Minnesota Legislature requested the Commissioner of the Department of Natural Resources to "review and analyze other types of licensing systems and report to the Legislative House and Senate Environmental Finance Committees by January 15, 2000." In response to that request, this report provides a summary of the licensing system options that the DNR reviewed and selected to meet the licensing needs of the DNR.

The report also provides background on the current license system, and objectives and rationale for a new licensing system.

An electronic licensing point-of-sale terminal.

Background

THE CURRENT SYSTEM. The DNR's current hunting and fishing license system is paper based. Approximately 2.5 million licenses, comprising nearly 50 different categories of fishing and hunting licenses and hunting lottery applications are preprinted and distributed every year. The licenses are distributed by the DNR to the state's 87 County Auditors who in turn distribute them to approximately 2800 sub (license) agent locations across the state.

HOW IT WORKS. The majority of these licenses require the recording of customer information, a handwritten action generally carried out by the selling license agent. The first copy of each license purchased is provided to the customer and a carbon copy is returned by the agent to the County Auditor's office, where the copies are held. License agents submit license revenue to the County Auditor, and the County Auditors in turn remit license revenue, minus their 4% sales commission, to the DNR. The County Auditors receive the commission as payment for management of the license agents and license system in their county. License agents receive a $1.00 per license issuing fee for most of the licenses they issue.

Recreational vehicle registrations (snowmobile, watercraft, all-terrain vehicle, off-road motorcycle and off-road vehicle) and watercraft titling are handled by the DNR License Bureau and by the state's 171 Deputy Registrars of Motor Vehicles. Deputy Registrars submit registration and titling information and revenue directly to the DNR. The Deputy Registrars receive a filing fee of $2.00 for registrations and $3.50 for watercraft titles.

License fees for hunting and fishing generate approximately $40 million annually. Registration fees associated with registration of recreational motor vehicles generates approximately $10 million in revenue.

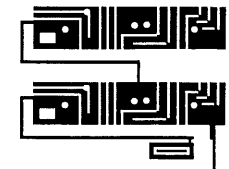
WHERE IT FALLS SHORT. The current paper based system for licensing hunting and fishing activities has not changed significantly over the past 100 years. The population of the state in 2000, however, is approaching three times that of 1900. A big game license issued 100 years ago and a current issue would display similarities in the hand-recorded information and the fact that issuance of the licenses took place through County Auditor offices. What worked well for the population of the state in 1900 falls short in the face of the sheer number of resource users today.

Implementation of the current paper-based system has become cumbersome, and the system's capacity for data and records management is inefficient. Customers can have difficulty finding access to all license types. The system's capability for providing important data for natural resource management is very limited.

WHAT WE'RE DOING ABOUT IT. Increasing pressures on natural resources demand highly accurate use and user data for effective resource management. Similarly, to respond to an increasing user base, our issuance systems need to be efficient and effective. And while striving to meet these needs, the DNR continues to look for the best methods for containing licensing management costs.

To this end, for more than 10 years, the DNR has been reviewing and investigating alternative licensing systems capable of improving and enhancing the delivery and useful scope of DNR licensing. In 1995, a formal DNR committee was appointed to pursue the development of a new electronic licensing system. This committee is comprised of representatives from all the major DNR Divisions and Bureaus involved in and/or affected by fishing and hunting licensing and recreational vehicle registration. The committee appointed a project manager in July 1996 and an assistant project manger in February 1997, based in the DNR License Bureau, to provide support and coordination for development and implementation of a new licensing system.

The DNR requested and received legislative authority to develop and implement ELS during the 1997 legislature. Initial legislation limited implementation of the ELS point of sale component to four counties within Minnesota. The legislation was changed in the 1999 legislative session in response to concerns expressed by DNR and potential system vendors over the high cost associated with developing and implementing a pilot without authority for statewide implementation following a successful pilot program. Current legislative authority allows for statewide implementation of the ELS point of sale component following a successful four county pilot.



License Management Objectives

The DNR's primary objectives in developing a new license system are to improve customer service, natural resource management, and license management. These objectives were initially established in 1996, based on input and review from license customers, license agents, county auditors, deputy registrars, license bureau staff, legislators, and resource agencies in other states that have implemented electronic license systems.

Listed below are the objectives and rationale for a new license system.

Improve Customer Service to License Customers and Agents

- Ensure that adequate quantities and types of licenses are available to meet customer demand at all times at license agent locations
- Provide alternative license ordering and delivery methods in addition to license agents (i.e. telephone, internet)
- Improve our capacity for dealing with common customer licensing problems (i.e. replacement of a lost licenses; ensuring that residence, age, and firearm certificate requirements are met for license purchases)

Improve Natural Resource Management in Minnesota

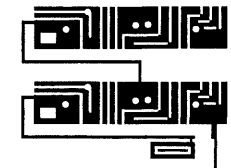
- Provide natural resource managers with an accurate and real time database of license customer information for natural resource management purposes (customer use and needs surveys, resource harvest statistics, etc.)
- Meet federal requirements for the Harvest Information Program
- Provide increased licensing flexibility for meeting season and/or harvest needs (i.e. bonus permits, season date changes, application deadlines)
- Enhance natural resource enforcement capabilities with real time license and licensee information

Improve License Management Business Practices

- Capture license revenue faster with electronic transfers of funds from agent accounts to state accounts
- Develop a direct relationship with all license agents to ensure consistent and reliable license delivery
- Improve license management (accounting and reporting of license sales) for license agents and the DNR
- Collect and/or issue a single identification number to identify individual customers

To meet these objectives the system must meet the following needs:

- Provide all types of licenses and adequate functionality (or editing capability) to ensure that complex license requirements can be met
- Be extremely reliable, providing a backup secure storage system for license data
- For license agents, the system must be user friendly and efficient
- The system must utilize existing telecommunications at agent locations (existing telephone line)
- The system must operate in a harsh business environment and utilize a minimum of (counter) space
- The cost of the system must be economically feasible for implementation at license agent locations without significant costs to the dedicated license accounts



System Review, Development, and Implementation

During the past 10 years, the DNR has reviewed various electronic hunting and fishing licensing systems that are in use or are being implemented in other states, and electronic delivery systems in use by the MN Dept. of Human Services and the Minnesota State Lottery. We have reviewed and explored the advantages and disadvantages of the various systems for customers, agents and resource agencies, analyzed cost benefits, and looked at acceptance levels for electronic systems by both customers and agents.

The major types of license systems could be defined into three broad areas:

Telephone ordering systems

Telephone ordering systems typically utilize either Interactive Voice Recognition (IVR) systems or operator assisted ordering systems. The IVR systems require input of license information via a telephone keypad or by voice to a preselected menu. Operator assisted systems use in-person staff to receive and input customer information into an electronic data base. The systems generally require payment by credit card with a convenience fee or transaction fee added to the cost of the customer's license(s). The systems generally issue an identification number which serves as a temporary license until an actual printed license is mailed to and received by the customer. As of the fall of 1999, fifteen states were using telephone licensing systems.

Point of sale terminal systems

Point of Sale (POS) systems utilize an electronic device (i.e. credit card type terminal, computer, smart telephone) to input customer data, send the data to a central computer or database for verification and/or storage and then print a license document at the location (or point) of the sale. Types of electronic devices vary but the use of "credit card" style terminals are the most common. Appendix One contains information on the three types of devices that were reviewed by the DNR for a POS application. As of Fall 1999, fourteen states have implemented POS systems.

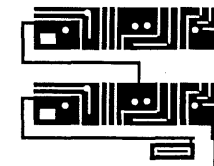
Internet based systems

Internet license systems vary in methods used for product delivery. Internet systems can print some license documents at any location equipped with internet access and a printer. Some internet license systems are similar to telephone systems providing a license document by mail and a temporary number for use pending receipt of a required document. As of the fall of 1999, seven states have or plan to implement internet license systems.

To meet the objectives of an upgraded license system,

the DNR proposed an Electronic Licensing System comprising three major components - ELS Telephone, ELS POS and ELS Internet.

The following pages contain a summary of the development and status of these components.



ELS-Telephone System

In December, 1997, the DNR issued a Request for Proposal (RFP) for an ELS-telephone system. We received two vendor proposals, but rejected both due to their high implementation cost estimates. The RFP was revised and issued a second time in the fall of 1998. Although the DNR received only one proposal - from Bass Pro Shops Inc. of Springfield, Missouri - that proposal met the needs of the RFP and was cost neutral to the DNR. DNR signed a contract with Bass Pro in January 1999. The ELS-Telephone System went into service in April, 1999.

The ELS-Telephone System:

- provides 24 hours a day /7 days a week customer access to most DNR hunting and fishing licenses over a toll free telephone number
- accepts credit card payment for licenses
- offers instant licensing through the use of a License Identification Number (LIN) which serves as a temporary license
- provides a standard license that is printed and mailed to the customer within 2 business days by the vendor
- maintains a database of customer license information for the DNR
- provides toll free access to DNR Conservation Officers for verification of licenses
- operates at no cost to the DNR. The vendor collects a transaction fee of $3.50 per call (from the customer) regardless of the quantity or kinds of licenses purchased. The transaction fee covers all costs of the system (telephone line charges, credit card charges, data storage, mailing and handling).
- includes vendor-provided marketing materials and funded marketing efforts (in cooperation with the DNR).

The ELS-Telephone System was enhanced in May, 1999, via legislative change, to allow customers from across the United States and Canada to order licenses by telephone. Prior to this change, the system had been limited by state licensing statutes to customers within Minnesota.

As of January, 2000, the system has issued nearly 4,000 licenses. The volume of ELS-Telephone System license sales are expected to increase significantly in the years to come.

ELS-POS System

The DNR reviewed POS license systems in other states and in Minnesota state agencies, specifically, the Department of Human Services and the Minnesota State Lottery.

Other States

The DNR reviewed POS systems, RFPs, contracts, and agency experiences from the states of Michigan, Texas, Missouri, Kentucky, North Carolina, Idaho, Montana, Wisconsin, and Maryland. These states provided valuable information and insight into development and implementation of a POS licensing system for a natural resource agency.

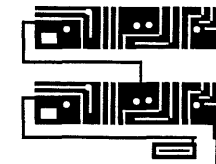
Minnesota Department of Human Services

The DNR reviewed the Department of Human Services' Electronic Benefits Transfer (EBT) card system. The EBT card system is used to deliver welfare benefits to customers using ATM and POS terminals at certain grocery retailers. Based on the success of the EBT card system RFP, the DNR used this RFP as a basis to develop the ELS-POS RFP.

Minnesota State Lottery

The DNR considered use of the Minnesota State Lottery's existing system for delivery of license services, and determined that a separate independent POS system would be needed to meet DNR license objectives and requirements.

The Minnesota State Lottery uses terminals at various retail locations to issue online lottery tickets. The DNR Commissioner's Office staff and the Director of the Minnesota Lottery and staff met in November 1995 to explore the potential use of lottery terminals to provide DNR licensing services. Based on ideas exchanged at that and ensuing meetings it was determined that it would be difficult, inefficient and costly to utilize the existing lottery system for DNR license sales. The lottery system would need major modification to meet the objectives of the new licensing system.



Major concerns with utilizing the lottery system:

- Its incapacity to meet DNR license requirements - entry of customer data through a card swipe and computer keyboard were not available, edits and the necessary functionality to ensure that license requirements are fulfilled would prove too difficult and costly to incorporate into the existing lottery system. Lottery terminals are intended to maintain a high level of security while producing a high volume of a single type of deliverable and are more costly then most license POS terminals.

- Its incapacity to support major sales events simultaneously - The possible convergence of a large lottery amount (jackpot) creating high volume lottery sales with the opening of a major hunting or angling season creating high volume license sales would likely cause excessive customer and agent inconvenience and a probable system overload which would result in lost revenue and sales for both.

- Questionable capability and placement of some lottery retailers for good service as license agents - license agents must be well-informed regarding license requirements to ensure good customer service, and license agents need to be located where license sales typically take place.

These concerns are supported by a 1995 study and report to the Minnesota Legislature entitled "ELECTRONIC SERVICES Licensing, Permitting and the State Lottery Network," authored by the Minnesota Department of Administration's Information Policy Office. The study and report focuses on the use of the Minnesota State Lottery as a means to provide electronic licensing and permitting for the DNR and the Department of Public Safety's Division of Motor Vehicle Services, and states in part that "Although sounding simple, the issuance of state fishing licenses through the Lottery network is complicated by the variety of fishing licenses available as well as numerous eligibility categories." Appendix 2 of this report contains excepts from the quoted report. Appendix 3 describes the various DNR licenses and eligibility requirements.

The Minnesota State Lottery was consulted and provided important insight in to development of an ELS-POS system. Technical telephone communications and contract requirements were two areas in which Lottery input was helpful.

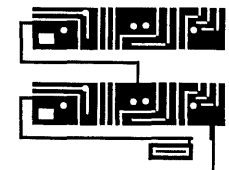
ELS-POS RFP

The DNR issued an RFP for the ELS-POS System in November 1997. The RFP required potential vendors to develop and implement an ELS-POS system to meet the license system objectives and requirements as listed in the RFP. Any contracted vendor would receive payment after the system was operational based on a fee per license issued. The DNR did not have funding available for development and equipment purchase and had legislative authority for four pilot counties only; statewide implementation was pending legislative approval.

The RFP was requested and reviewed by 10 major POS vendors but only three proposals were submitted to the DNR. The three proposing vendors were Central Bank of Missouri, Client Servers Inc. of Maryland and MCI of California. DNR contacted several of the vendors who had not responded with a proposal in order to determine why they did not respond. Those vendors indicated that the lack of up-front funding, combined with the lack of statewide implementation authority were the primary factors for their declining to present proposals.

The three received proposals were put through an extensive review (Appendix 1). Based on this review DNR selected Central Bank of Missouri to provide the ELS-POS System and began contract negotiations with Central Bank in June of 1998. Contract negotiations proved difficult due to the lack of funding, higher than expected transaction costs and the failure of DNR to receive statewide implementation authority for the ELS-POS System. In April of 1999, however, a contract was signed, followed by development of a detailed design document for the ELS-POS System. Appendix 3 contains portions of that design document.

Since that time, the DNR has been granted authority to implement ELS statewide pending a successful four county pilot. A four county ELS-POS pilot was begun in November of 1999. Pending a successful pilot, the statewide implementation is expected to be completed by the beginning of Minnesota game & fish license year 2000 (March 1, 2000).



ELS-Internet

For the past several years, the DNR has been exploring the development of a license ordering and delivery system accessible from the DNR web page (www.dnr.state.mn.us). This concept has been linked to an electronic commerce initiative for numerous state agencies. The DNR had planned to have an ELS-Internet licensing system in operation by the summer of 1999, but due in part to its inclusion in the electronic commerce initiative, has not yet done so.

Concerns specific to internet licensing as it relates to electronic licensing as a whole include license enforcement issues and translation of internet-acquired license information into the ELS database that will be used by the ELS-POS and ELS-Telephone Systems.

The DNR has reviewed presentations and held discussions with vendors interested in providing the internet licensing service. Potential internet licensing vendors would charge a customer transaction fee similar to the ELS-Telephone system. The DNR would not incur any direct costs for an internet licensing service. The DNR is presently considering development of an RFP for the ELS-Internet System.

Summary

The DNR's current licensing system will be replaced with an Electronic Licensing System containing Telephone, Point of Sale and Internet components. The DNR has reviewed the various types of licensing systems and has determined that these three components, as described in this report, currently best meet the objectives and needs for a new license system.

The DNR will continue to explore new technologies with its customers and other state agencies to ensure that licensing objectives are met and that customer needs and expectations are met or exceeded.

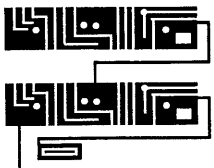
Acknowledgments

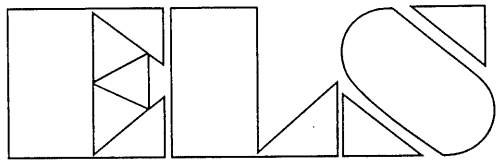
The DNR would like to acknowledge:

The Departments of Administration, Human Services, and Public Safety, and the Minnesota Lottery for the insight and assistance they have provided and continue to provide on the ELS project.

The many state natural resource agencies and staff who have shared information and experiences with DNR staff.

The International Association of Fish and Wildlife Agencies for their support of the American Wildlife Data Systems (www.iafwa-asds.com) initiative.



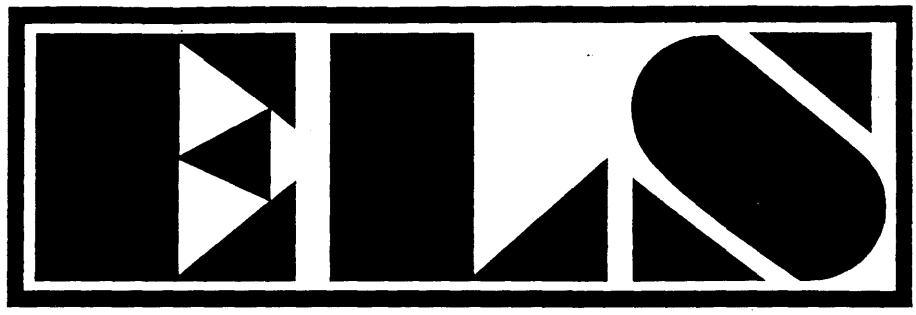


Electronic Licensing Systems for the Minnesota Department of Natural Resources

Appendix One

Evaluations of ELS - POS Vendors

The entire March, 1998 report to the DNR Selection Committee on results of the evaluation of vendor proposals is included.



Report to the DNR Selection Committee on Results of the Evaluation of Vendor Proposals to the ELS - POS System RFP

March 25, 1998

Report to the DNR Selection Committee on Results of the Evaluation of Vendor Proposals to the ELS-POS System RFP

The Department of Natural Resources (DNR) Electronic Licensing System Committee is recommending that the Department enter into negotiations with the selected vendor to develop, implement and operate an Electronic Licensing System - Point of Sale System (ELS-POS) in Minnesota. This report is a summary of the evaluation process and results. Questions or requests for information can be directed to Tom Keefe, ELS Project Manager, DNR or Bruce Charon, Department of Administration.

Background: The DNR is developing an Electronic Licensing System (ELS) to replace the current licensing system. The ELS system will provide customer access to DNR licensing in three new ways. Licenses will be available by telephone, Internet connection and by point of sale terminals located at license agent locations. The ELS-POS system is expected to handle more than 95% of the license transactions. The DNR released a Request for Proposal (RFP) for the ELS-POS System on November 3, 1997. The DNR received three proposals for this RFP by the deadline of January 23, 1998. The responses were evaluated based on the requirements of the RFP and a recommendation on selection of a vendor is presented in this summary.

Evaluation: The evaluation of vendor proposals began on January 26, 1998 and was completed on March 16, 1998. Evaluation teams were appointed to evaluate the proposals on the basis of how each vendor's proposal met the management, functional, technical and cost needs of the RFP. These teams completed an initial evaluation, attended vendor presentations and completed the team evaluations, prior to release of cost information. After the management, functional and technical sections were evaluated the cost section was reviewed and evaluated. Selection team members received a copy of the scoring guidelines, worksheets and criteria in the February 4, 1998-memo from Eugene Gere, Assistant Commissioner for Administration.

Results: The DNR received three proposals from three vendors; Central Bank of Jefferson City, Missouri, MCI of McLean, Virginia and Client Servers of Silver Springs, Maryland in response to the ELS-POS RFP.

Management, Functional, and Technical Sections: A summary of the evaluation findings for the management, functional, and technical sections follows. The summary contains; a fact sheet comparing vendor proposals, and an overview of the vendor's system proposal and a list of the proposal strengths and weaknesses for each proposal. A summary of the actual scoring for the management, functional and technical sections is in Table 1. Refer to the team evaluation forms for additional information.

ELS-POS VENDORS

VENDOR	Central Bank Jefferson City, MI	MCI McLean, VA	Client Servers Silver Springs, MD
Annual Revenue	100 million +	10 billion +	5 million
Experience	Missouri, Wisconsin DNR POS and Banking	Firearms registration check Auto Emissions	Maryland DNR POS Professional Licenses
SUB- CONTRACTOR(s)	Envoy , Nashville, TN IBM, Mpls. MN Intertech, St. Paul, MN	None	Automated Wagering I New Brighton, MN
System Solution	mainframe	client server	client server
POS Hardware	VeriFone-terminal	Screen Phone	PC-terminal
Keyboard	yes-medium size	yes-small size	yes-medium size
Monitor	4 lines	16 lines	9 inch monitor
Printer (Tier I) and Material	VeriFone 250/Ovation 2 Valeron	Epson 200 Tyvek	Ovation 2 Valeron
Printer (Tier II) and Material	Ovation 2 Valaron	Eltron FanTastock	Ovation 2 Valeron
Primary Agent Training Method	Telephone	Telephone	Classroom/on site
Agent Service	Mail	Mail	On-Site
Dedicated Telephone Lines	No	No	Yes
Call Base	Nashville, TN	Sacramento, CA	New Brighton, MN
Computer Base	St. Paul, MN	Sacramento, CA	New Brighton, MN

Central Bank: Central Bank of Jefferson City, Missouri submitted a proposal using three subcontractors. Central Bank developed a POS system for the Missouri Department of Conservation using VeriFone equipment and Envoy Corporation as their primary subcontractor. They operate the Missouri system on a mainframe computer system in Jefferson City. Since developing the Missouri system, Central Bank has made proposals for Nebraska and Wisconsin that were selected. Nebraska, however, did not receive legislative authority for a contract with Central Bank. The Wisconsin contract was signed in late 1997 and they are currently in the development phase.

Central Bank will serve as the primary contractor, Envoy is a subcontractor that will handle telecommunications, agent training and support. The Department of Administration's InterTechnologies Group will provide the mainframe computer support and IBM will be used for project management. The proposal will utilize VeriFone terminals and printers along with an Ovation 2 printer for licenses and decals. The terminals will call into a central telecommunication center in Nashville, TN and then be routed for verification and authorization to the InterTechnologies' (InterTech) mainframe in St. Paul, MN. The DNR will download license information from the InterTech mainframe. Upon verification, a message containing license information will be sent back to the POS terminal and a license will be printed.

Strengths and Positive Attributes

previous experience in G & F licensing

has an existing solution in use.

companies with strong financial background and experience in POS management (Envoy).

strong project management skills (IBM)

strong banking ability to handle EFT

Concerns or Potential Weakness

ability to handle management or potential problems with numerous subcontractors and ensure good communication.

InterTech's role and responsibility???

telephone training of Agents is it adequate?

number of steps to complete a transaction appear high

lack of definition on how they would meet certain functional requirements including; ability to handle Tier II with proposed equipment, the ability and cost to perform downloads or changes in license requirements, and small screen for data input

certain areas of the proposal need further clarification and they appeared to avoid issues and questions.

MCI: MCI's Telecommunication Division in McLean, Virginia submitted the proposal. MCI has developed similar POS systems for emission control stations and recently for firearm purchase eligibility. These systems utilize a POS terminal to collect the information, and download the information to a MCI server in Sacramento CA. The agencies then download or utilize the MCI database to gather information. They have not completed a game and fish licensing project. MCI proposes to use a Phillips screen telephone as the POS terminal. This type of telephone/terminal is used by UPS. The terminals would collect the information transmit it to a central server in Sacramento, the license authorization would occur on this server and a message would then be sent back to the terminals. The server in Sacramento would then download the information to DNR. MCI does not propose to utilize any subcontractors.

Strengths and Positive Attributes	Concerns or Potential Weakness
strong financial base and management	lack of experience with G&F licensing
some experience in POS	no existing system
customize system specific to MN	very limited information on HOW they will meet the needs and system requirements.
telecommunications capability strong	Year 2000 concerns with terminals
strong quality management and project management	telephone training of agents is it adequate?
no subcontractors	keyboard small
larger screen than a VeriFone	

Client Servers: System Automation's, Client Servers Division of Silver Springs, Maryland submitted a proposal using Automated Wagering International (AWI) (this company handles the MN state lottery terminals) as a subcontractor. Client Servers propose a PC based terminal that uses a CPU, custom keyboard, and 9" monochrome monitor. The software system is called Sportsman 2000 and is currently being implemented in the state of Maryland for licensing anglers, commercial fisherman, hunters and boat registration. The proposal has Client Servers serving as the primary contractor and developing the system and AWI providing license agent support. The proposal provides for extensive agent training and terminal support. The proposal also includes dedicated lines to license agents terminals. The terminals can operate on shared telephone lines, but the dedicated lines would improve functionality of the system.

The terminals would contact a server at the AWI location in New Brighton, MN. The verification and authorization of licenses would occur there. The DNR would download the information off the AWI server.

Strengths and Positive Attributes

G & F License and boat registration experience in Maryland

locally based and capable subcontractor AWI knows state (telephone, agents)

good management plans and flat corporate structure

high quality standards (ISO 9000)

monitor and keyboard and system very user friendly

improved E-Mail capabilities

outstanding agent training and support and stock inventory system

exceeded functional needs in many areas within RFP

very well written proposal

make changes in licenses from DNR easy

add on capability (other systems, bar code scanners etc.)

Concerns or Potential Weakness

project manager not located locally

very limited financial capability and resources

provided only one of the two requested Project Plans

can we afford the dedicated lines and high level of license agent support???

TABLE 1

MANAGEMENT, FUNCTIONAL, AND TECHNICAL SCORING

MANAGEMENT	WT	CENTRAL BANK RATING	CENTRAL BANK POINTS	MCI RATING	MCI POINTS	CLIENT SERVER RATING	CLIENT SERVER POINTS
B. Vendor Qualifications	A	3.6	256	4.0	284	2.6	185
C. Subcontractor Qualifications	C	2.8	65	4.2	71	4.0	68
D. Project Organization Staffing	C	3.2	54	3.8	65	2.4	41
E. Management Plan Components							
1. Quality Mgmt	B	3.4	119	4.4	154	4.4	154
2. Transition Mgmt	C	3.2	54	3.8	65	4.2	71
3. Risk Mgmt	B	3.8	133	3.4	119	4.6	161
4. Problem Mgmt	B	3.4	119	3.8	133	4.0	140
5. Communication & Coordination	C	2.0	34	4.0	68	3.6	61
6. Integration Mgmt	C	4.0	68	2.8	48	3.6	61
7. Configuration Mgmt	C	3.6	61	3.4	58	3.8	65
8. Oversight Mgmt	C	3.6	61	4.0	68	3.4	58
9. Project Mgmt	B	4.2	147	4.2	147	3.8	133
F. Project Workplan	A	3.4	238	4.2	294	2.6	182
TOTAL POINTS			1,409		1,574		1,380

FUNCTIONAL TEAM RATING	WT	CENTRAL BANK RATING	CENTRAL BANK POINTS	MCI RATING	MCI POINTS	CLIENT SERVER RATING	CLIENT SERVER POINTS
B. Transaction Processing-Two Tier							
1. Collect, Store, Retrieve Customer Info	A	3.0	135	3.0	135	3.6	161
2. Issue Licenses/Permits	A	3.0	135	3.0	135	3.7	167
3. Collect Wildlife Harvest Info	C	3.0	33	3.0	33	3.9	42
4. Collect , Store, Retrieve Customer Registration Info	B	1.4	31	3.1	69	3.9	85
5. Issue Recreational Vehicle Regs.	B	1.3	28	3.0	66	3.1	69
C. License Agent Management/Support							
1. Communication Capability to Agent	B	2.9	63	3.6	79	3.7	82
2. Accounting Reports/ Sales Info	B	3.0	66	3.0	66	3.1	69
3. Vendor Support to Agents	B	2.9	63	3.3	72	4.3	94
D. System Operation /Support							
1. Vendor to Provide Services for all Equip.	A	2.1	96	2.3	103	4.7	212
2. System User -friendly, Accurate Info Input	B	2.6	57	3.1	69	4.0	88
3. System to Download Changes	C	2.6	28	3.0	33	4.4	49
E. Training							
1. Training Plan to Contain Following:	B	3.1	69	3.3	72	3.4	75
2. Training Plan to Meet Listed Requirements	B	3.1	69	3.4	75	3.3	72
F. Collection, Deposit Posting of Receipts							
1. EFT	A	3.6	161	3.0	135	3.0	135
2. Posting to MAPS	B	3.1	69	3.0	66	3.0	66
TOTAL POINTS			1,103		1,208		1,466

TECHNICAL	WT	CENTRAL BANK RATING	CENTRAL BANK POINTS	MCI RATING	MCI POINTS	CLIENT SERVER RATING	CLIENT SERVER POINTS
B. Response Requirements	A	3.5	179	3.0	153	3.5	179
C. Proposed Overview of the ELS-POS System	C	2.8	30	3.8	41	3.3	36
D. Technical System Requirements							
1. Transaction Capabilities	B	3.0	78	3.8	98	3.0	78
a, On-Line	B	2.8	72	3.3	85	3.5	91
b. Off-Line	B	3.3	85	2.8	72	3.3	85
2/3. Availability & Reliability	A	3.3	169	2.8	143	3.5	182
4. System Operation Reports	C	3.0	39	3.0	39	3.5	46
5. Standards	C	3.0	39	3.0	39	3.8	49
6. Year 2000 Warranty	C	3.0	39	2.0	26	3.5	46
7. Telephone & Internet	C	3.0	39	2.5	33	3.3	42
E. Integrated Database	A	3.3	169	3.0	156	3.0	156
F. Technical Communication Environment	B	3.3	85	3.5	91	3.3	85
G. Security Plan	B	3.3	85	3.8	98	3.5	91
H. Disaster Recovery, Backup, Conting.	A	3.3	169	4.0	208	3.0	156
TOTAL POINTS			1,277		1,282		1,322

Cost Section: The cost of the vendor development, implementation and operation of the ELS-POS system was to be paid based on a cost per transaction for the life of the contract. The cost proposals were developed this way, because no up-front or initial funding would be available and the cost of the system would be covered by operational saving over the current system. The cost portion of the RFP requested vendors to provide cost proposals based on 2.5 million Tier I transactions and .5 million Tier II transactions. A transaction was identified as the sale or issuance of a single license, stamp or registration transaction. A summary of the cost information is provided in Table 2.

The cost per transaction varied from $1.02 for Central Bank, $1.63 for MCI and $3.75 for Client Servers. The major increases in costs for MCI and Client Servers were based on higher development costs, higher cost terminals, and higher levels of license agent support. Client Servers provided dedicated and on-site terminal maintenance and service for license agents, along with dedicated telephone lines. Review of the cost information indicated that the proposals that exceeded the RFP requirements and provided enhanced service to agents and the state, resulted in a significant increase in cost. These proposals received higher scores in the functional and technical areas, but lower scores in the cost section scoring. Central Bank scored the highest in the cost section, while meeting the RFP requirements. The committee reviewed the cost proposals for areas of further cost reductions, but the committee came to the conclusion that the Central Bank proposal would still be the highest scored vendor proposal.

Scoring Summary: The following is a summary of the evaluation scoring criteria by vendor.

Scoring Criteria	Central Bank	MCI	Client Servers
Management	1409	1574	1380
Functional	1103	1208	1466
Technical	1277	1282	1322
Cost	4000	2511	1088
Total Score	**7789**	**6575**	**5256**

TABLE 2

COST EVALUATION and SCORING

	CENTRAL BANK		MCI		CLIENT SERVER	
DEVELOPMENT						
System Analysis and Design	488,000	0.04	2,101,553	0.14	408,231	0.0
System Testing	152,258	0.01	1,050,776	0.07	335,579	0.0
Software Development	805,462	0.07	2,101,554	0.14	2,195,374	0.1
Other- Project Managment	440,000	0.04	0	0.00	0	0.0
	1,885,720		5,253,883		2,939,184	
HARDWARE						
License Agent Terminals & Printer	3,325,920	0.29	4,486,465	0.30	6,888,811	0.9
Hardware Platform & Communications Hub	2,426,198	0.21	1,190,605	0.08	2,199,759	0.1
Telecommunications Links	82,400	0.01	1,562,423	0.10	17,914,344	1.4
Other Hardware Needs	568,072	0.05	0	0.00	0	0.0
	6,402,590		7,239,493		27,002,914	
Support Costs						
Initial Training for License Agents	235,284	0.02	204,587	0.01	981,833	0.0
On Going Training for License Agents	98,106	0.01	68,185	0.00	49,091	0.0
Initial & Ongoing Help Desk Services	604,320	0.05	1,440,598	0.10	10,626,871	0.8
	937,710		1,713,370		11,657,795	
Operational Costs						
System Hardware Maintenance & Repair	885,200	0.08	5,112,470	0.34	1,276,383	0.1
License Stock Cost	1,618,780	0.14	3,480,814	0.23	1,109,458	0.0
System Software Maintentance	0	0.00	0	0.00	1,014,560	0.0
	2,503,980		8,593,284		3,400,401	
Total Costs	11,730,000	$1.02	22,800,030	$1.52	45,000,294	$3.7
Number of Transactions in Calculation	11,500,000		15,000,000		12,000,000	
Total Cost per Transaction	$1.02		$1.52		$3.75	
Transaction Years	4		5		4	
Analysis 4 years:						
DEVELOPMENT	8,523,594		12,697,963		30,923,931	
COST PER TRANSACTION @ 12 MIL. 4 YEARS	$0.74		$1.06		$2.58	
OPERATIONAL	3,206,406		10,102,067		14,076,363	
COST PER TRANSACTION/PER PROPASAL	$0.28		$0.67		$1.17	
Calculated Cost for Four Years	**$1.02**		**$1.73**		**$3.75**	
Per Proposal at Four Years	**$1.02**		**$1.63**		**$3.75**	
Assigned Points	**4,000**		**2,511**		**1,088**	
(Client Server at 2.62 state ded lines)					1,557	

Recommendation: Based on the evaluation criteria the highest scoring proposal received was the proposal from Central Bank of Jefferson City, Missouri. The ELS committee recommends that we begin negotiations with Central Bank to develop, implement and operate the ELS-POS System in Minnesota based on the ELS-POS RFP and Central Bank's proposal.

The committee did raise strong concerns on various aspects of the Central Bank proposal and this is reflected in the scoring of the management, functional and technical sections. These concerns must be addressed in the negotiation process to ensure a successful system that meets the customers and Department's needs.

An Appendix follows with a summary of ELS-POS System Costs to dedicated accounts and photocopies of the proposed terminals and printers.

ELS-POS System Costs

This is a summary of the ELS-POS System cost estimates and the potential impacts to existing license costs. The following estimate is based on 2.5 million hunting and fishing license transactions* and .5 recreational vehicle registration transactions* (excluding titling). The interest income earnings are based on $40 million dollars of hunting and fishing license revenue being deposited from license agents in dedicated accounts six weeks sooner with ELS.

ELS-RFP SYSTEM - COST AND SAVINGS ESTIMATES AND EVALUATION

COST EVALUATION	Tier 1 (Hunting and Fishing)	Tier 2 (Recreational Vehicle)
ELS-POS System Costs		
Transaction Costs @ $1.02	$2,550,000	$510,000
Stamp Mailing Costs**	$ 150,000	N/A
Cost Totals	**$2,700,000**	**$510,000**
ELS-POS System Savings		
Printing/Distribution	$ 500,000	$420,000
County Auditor Commission	$1,600,000	N/A
G&F Interest Income***	$ 300,000	N/A
Savings and Interest Totals	**$2,400,000**	**$420,000**
Net Savings or (Cost)	**$ (300,000)**	**$ (90,000)**

The cost to implement ELS-POS is estimated to cost an additional $300,000 from the game and fish accounts and $90,000 from recreational vehicle accounts. These are estimates and additional costs or saving/earnings may occur during the contract. The ELS committee is reviewing ways to reduce the cost of the ELS-POS System. These cost reductions include: payment of development costs up-front rather than over the contract period, removal of the stamp mailing requirement or making it optional and charging a handling fee to cover shipping costs, voluntary reduction in the current number (2800) of license agents, license agents and/or deputy registrars covering part of the ELS-POS System costs, and reviewing the needs of the ELS-POS System.

*The actual license sales, vehicle registration numbers and costs will vary do a number of factors. The actual game and fish license transactions are around 2.3 million but with lottery entry and increase sales a figure of 2.5 was used in the ELS-RFP, current vehicle transactions covered by ELS will equal around 400,000, but 500,000 was used in the ELS-RFP. The ELS-POS saving reflect these higher volumes of sales and transactions.

**Cost of Mailing 300,000 hunting stamps to customers per legislative requirement.

***Current licensing does not provide for timely deposits to the Game and Fish Dedicated Account that would be available with EFT under the ELS-POS System. If the ELS-POS System can speed up deposits by six weeks it would result in significantly higher interest earnings. Based on 40 million dollars in hunting and fishing license revenues coming in six weeks sooner and receiving 6% interest on the account, the additional interest earnings equals $300,000 a year.

Keyboard 100

FEATURES

- Interfaces through an RS-232 port with OMNI and TRANZ terminals, including the OMNI 390, OMNI 395, TRANZ 380, and TRANZ 380 x2
- Allows easy alphanumeric data input through a full QWERTY keyboard
- Saves counterspace through its minimal footprint
- Conserves space through the use of a specially designed stacker

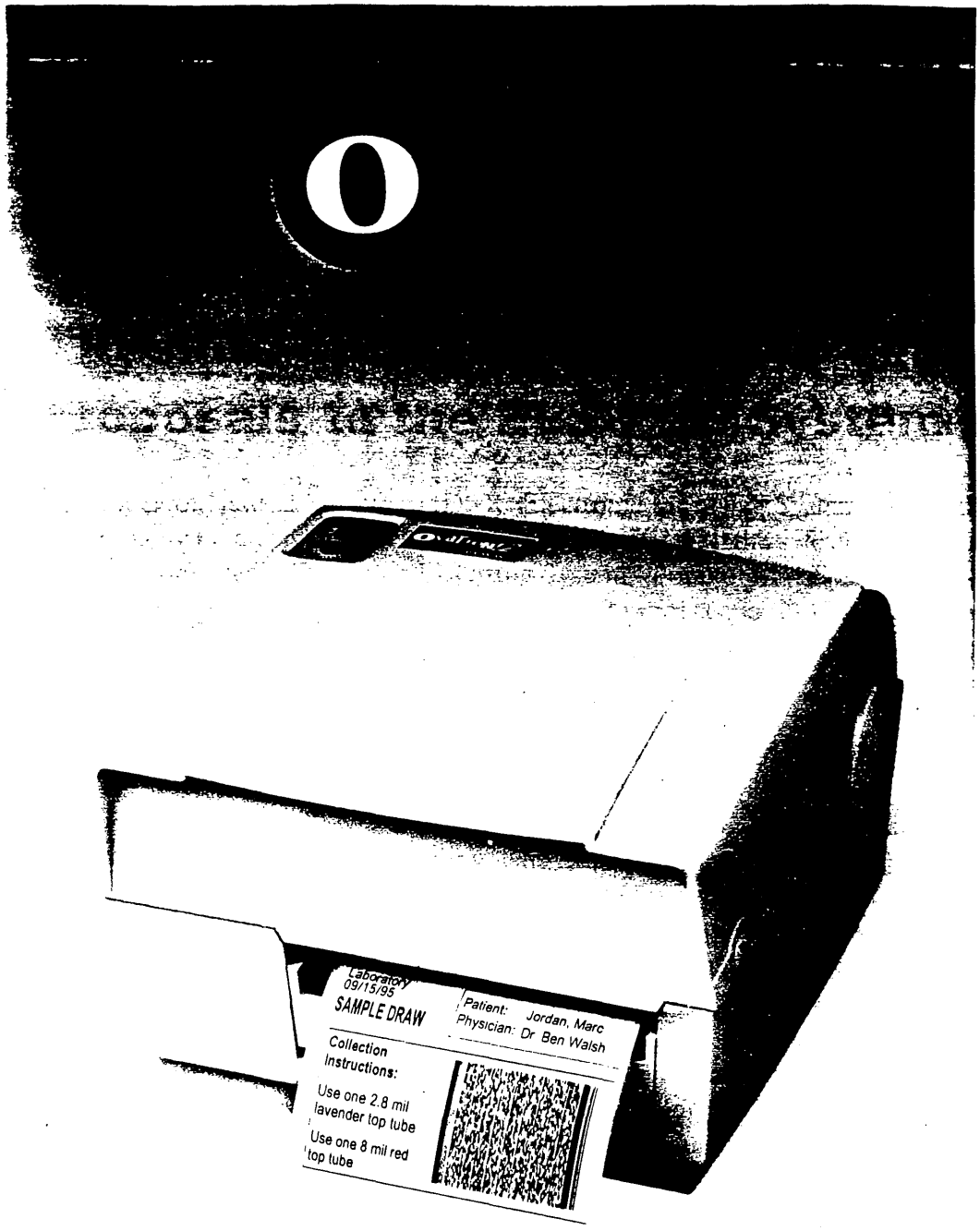
SPECIFICATIONS

HARDWARE	
Type	85/86 keys QWERTY keyboard plus 12 function keys (85 keys for U.S./ 86 keys for European)
COMMUNICATIONS	
Serial Data Output	RS-232 standard compatible Baud rate: 9600 Data bits: 8 Parity: None Stop bit: 1
PHYSICAL	
Height	1.5 in (38.2 mm)
Width	11.4 in (288.5 mm)
Depth	5.7 in (144 mm)
Weight	1.0 lb (0.47 kg)
ENVIRONMENTAL	
Operating Temperature	32° to 104° F (0° to 40° C)
Storage Temperature	0° to 151° F (-18° to 66° C)
Operating Humidity	15% to 90%, non-condensing
POWER	
Input Power	9 VAC, 100mA rms

The Keyboard 100 combines with a variety of VeriFone equipment to provide the complete processing needed for many of today's complex solutions. (Shown here with the OMNI 390, PRINTER 900 and PINpad 101.)

VeriFone.

Three Lagoon Drive
Redwood City, CA 94065-1561
TEL: 415-591-6500
FAX: 415-598-5504



For the ultimate in economy and ease of use, ask for Datamax's Ovation!™2 thermal label printer. The Ovation!™2 printer blends quality and flexibility with a lower cost of ownership, delivering more for your dollar in an innovative, space-saving package.

With a small footprint of 8.8 inches (224mm) by 10.1 inches (257mm), the Ovation!™2 printer may be installed where workspace is restricted and easily moved from one print station to another for point-of-use labeling. An optional wall mount kit enables the unit to hang from a wall or other vertical surface if counter space is not accessible.

The standard Ovation!™2 printer supports direct thermal printing; a field installable thermal transfer mechanism is available.

DEMAND DATAMAX

A new thermal printhead engineered for economy provides reliability and quality with lower cost of ownership.

The Ovation!™2 printer generates superior quality linear and two-dimensional bar codes, bitmapped and scalable typographic fonts and precisely defined graphics and logos at 203 dpi (8 dots per mm) resolution. For text and graphic intensive labeling, a standard Windows® driver allows users to print labels from virtually any Windows based application.

Additional options include: battery pack, cutter, present sensor for on-demand printing, typographic fonts, FLASH cartridges, memory expansion, time and date clock and PC Batch™ label preparation software.

DATAMAX®

THE PHILIPS SCREEN PHONE

- Send & Receive Internet E-Mail
- Browse the World Wide Web
- Use Advanced Caller ID Services
- 200-Person Speed Dial Directory including name, address, and e-mail
- Electronic Banking

ook inside for
9 more reasons why
your next phone
should have a
Philips screen on it...

PHILIPS HOME SERVICES

PHILIPS

EPSON®

TM-U200

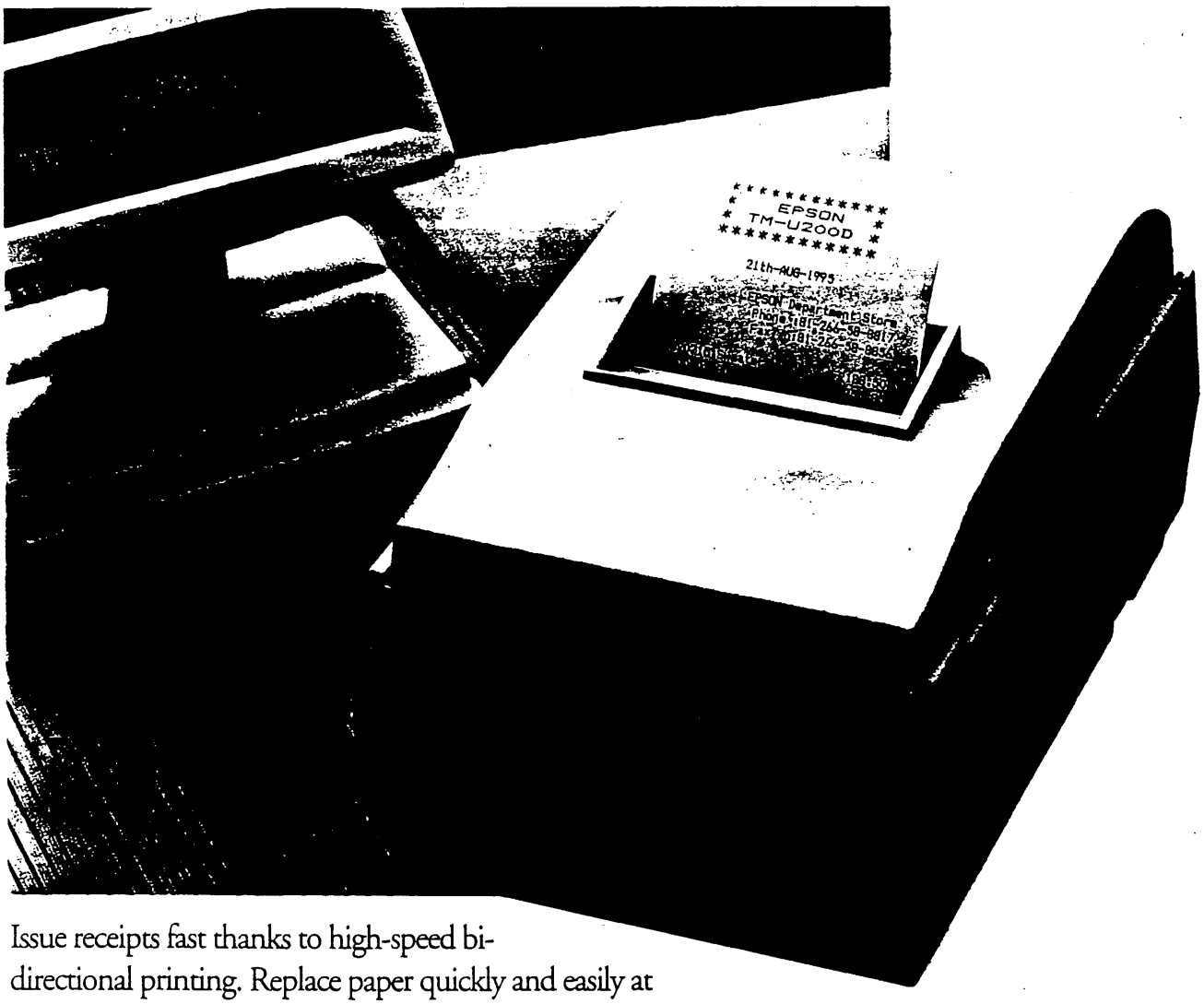
ESC/POS®

OLE POS Conforms to OLE POS specifications.

Receipt Printer

Highly reliability and a proven track record.
The TM-U200 is the standard POS printer.

Receipts Journals Tickets Credits Debits Daily reports Kitchen Delivery

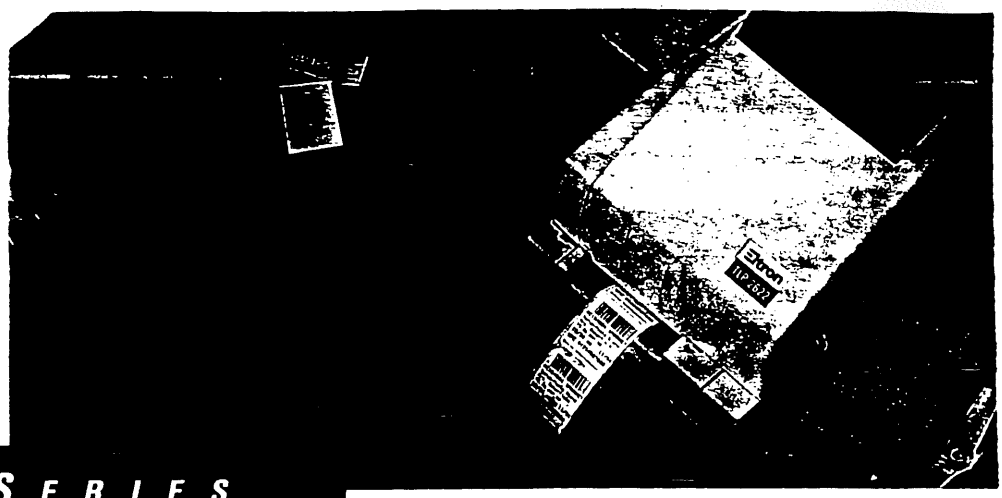


Issue receipts fast thanks to high-speed bi-directional printing. Replace paper quickly and easily at paper end with the drop-in roll-paper loading system. And for the broadest selection of applications, use the TM-U200 in combination with an EPSON intelligent Module. You can also choose the printer with 2-color printing , for further applications.

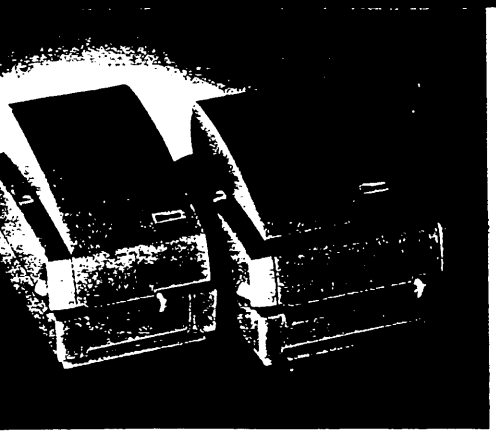
LP/TLP 2622

LP/TLP 2642

LP/TLP 3642



PRICEPRO SERIES



The Industry's Low Cost Direct Thermal and Thermal Transfer Label Printers

Save space on your desktop with these hard working, on-demand direct thermal and thermal transfer printers. Print labels and tags with **text, graphics** and a wide range of bar codes.

Designed for a wide variety of business applications, these reliable, low maintenance printers feature permanent downloading of label and tag formats, soft fonts and graphics. You get faster throughput when and where you need it.

Designed for use in many applications, including:

- Shipping and receiving labeling
- Clinical laboratory specimen labeling
- Retail UPC and EAN labeling
- Shelf labeling

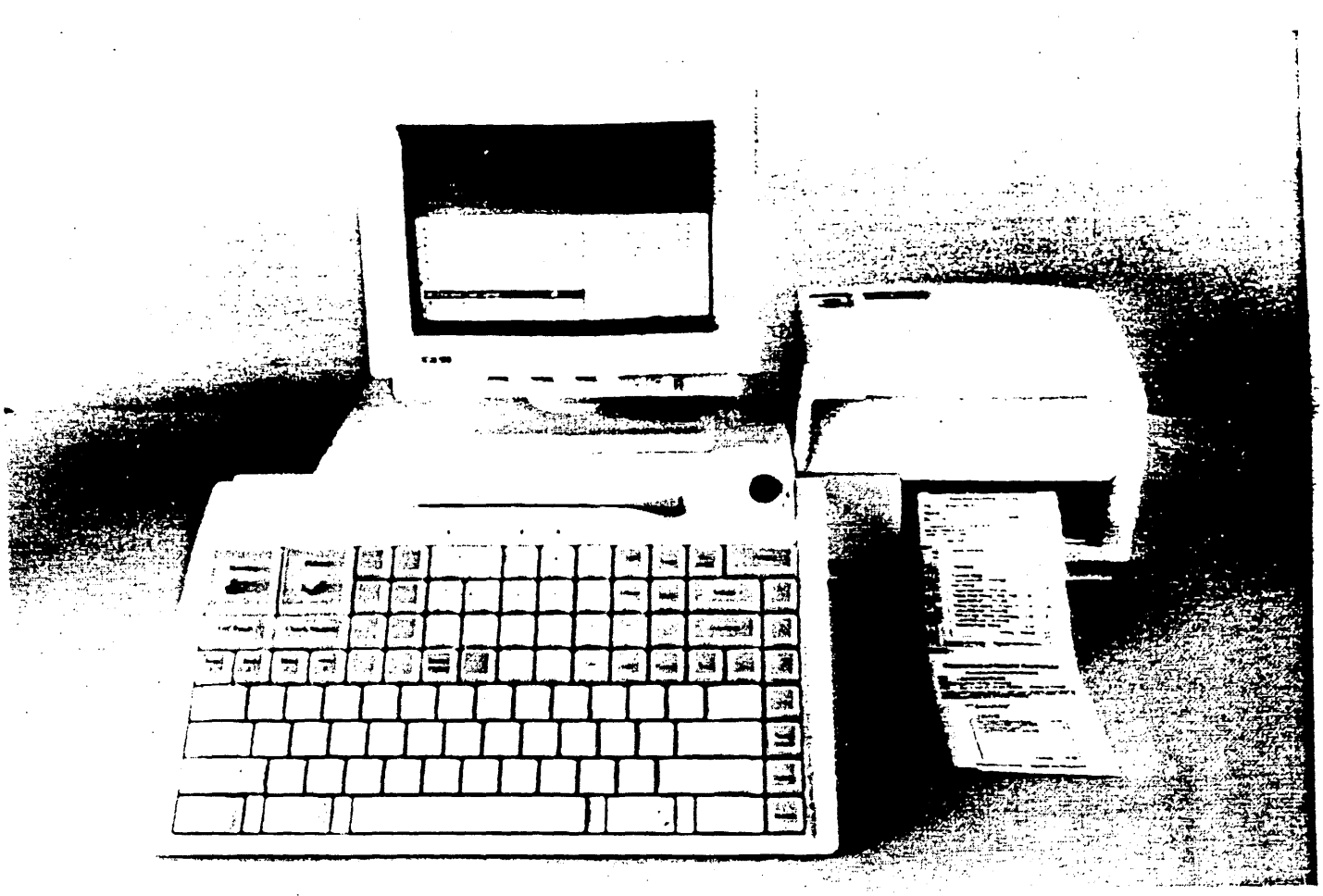
All for a price far below other thermal label printers!

More PricePro Printers from Eltron.

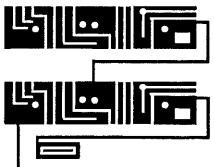
All Eltron Printers are built to tough ISO 9002 standards.

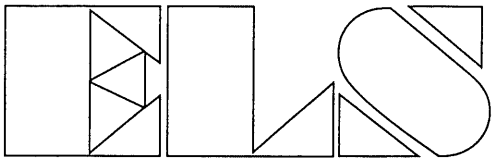
Eltron

THE ECONOMIES ARE ENGINEERED IN



Client Servers - CPU, 9 inch monitor, custom keyboard and Ovation printer





Electronic Licensing Systems for the Minnesota Department of Natural Resources

Appendix Two

Electronic Services Report 1995 (excerpts)

**Subsequent to this report, the state of Oregon has discontinued use of their lottery system for issuance of game and fish licenses.*

ELECTRONIC SERVICES

Licensing, Permitting, and the State Lottery Network

JANUARY 1995

Minnesota Department of Administration
Information Policy Office

320 Centennial Office Building
658 Cedar St.
St. Paul, MN 55155

CONTENTS

EXECUTIVE SUMMARY

In 1994, the Minnesota Legislature requested that the Department of Administration study electronic services and how to provide them in an accessible, affordable fashion to state government's customers. Administration's Information Policy Office with assistance from the Management Analysis Division conducted the study and prepared this report.

In the past ten years, there have been dramatic technological advances which have allowed individuals to access information and services more quickly and conveniently. Minnesota citizens can now purchase gift certificates or Minnesota Twins baseball tickets through "kiosks" remotely located throughout the state. Like these private sector developments, Minnesota state agencies have also begun to examine how their service provision mechanisms may be enhanced through electronic processes.

From the findings in this report, a set of general conclusions may be drawn:

In terms of general statewide activities:

- When developing any service delivery system - electronic or otherwise - it is necessary to define the best methods for delivering a service, who users of the service are, when the service should be available, and where customers should be able to access the service.

- The primary obstacles to information technology-based services are organizational and political - not technological. Technology already exists for carrying out most of the transactions being considered by state agencies.

- Continued work on Minnesota's electronic service delivery infrastructure is necessary to ensure consistent and user-friendly interfaces for Minnesota's citizens.

- The Government Information Access Council was created in 1994 to improve public access to government information, and to improve government efficiency and effectiveness through the use of information technology.

In terms of agency activities:

- State agencies currently issue hundreds of licenses and permits and there are many ongoing and planned electronic service delivery initiatives in Minnesota.

- With some exceptions, there appears to be little cooperation among agencies, leading to a variety of agency-specific delivery system plans.

- There is a growing necessity for government agencies and jurisdictions to work together.

In terms of the Lottery:

- The Lottery has expressed interest in collaborating with other state agencies in the electronic delivery of licenses and permits, but states that applications are limited by strict security measures.

- In Oregon, fishing and hunting licenses are issued electronically through the state's lottery network.

- Although sounding simple, the issuance of state fishing licenses through the Lottery network is complicated by the variety of fishing licenses available as well as numerous eligibility categories.

Recommendations

Recommendations stemming from the above conclusions may be divided into three categories: those that have state-wide impacts and are policy-related; those that affect the various state agencies; and those that specifically relate to the Minnesota State Lottery. The following provides an overview of the report's recommendations. A complete set of recommended actions may be found on Page 39.

Statewide Policy-Related Recommendations: Work must continue on the state's electronic communications infrastructure. This includes coordination and planning already pursued by the Information Policy Office. Such efforts are essential to developing an electronic service delivery system that presents "one face" to Minnesota's citizens.

Agency Level Recommendations: Agencies currently pursuing electronic service delivery initiatives should continue their activities. These pilot projects will offer valuable information as new projects begin. Agencies pursuing electronic service delivery initiatives must also cooperate with one another and form collaborative efforts, both to decrease costs and increase quality of service. Careful planning and performance measures linking applications to outcomes are critical requirements for the pilot.

Lottery Specific Recommendations: The Lottery should continue exploring the possibility of providing access for a state-wide service delivery system. In addition, other networks, such as MNet, should be studied for possible use.

DEPARTMENT of NATURAL RESOURCES

The Department of Natural Resources is considering a three-part approach to license and permit distribution: maintaining the current system; building a customer data base, then using it to send a convenient mail-back renewal form; and establishing a kiosk network. The department is interested in working with other agencies to share kiosk costs.

Like Public Safety, Natural Resources may require a statutory change to operate kiosks; it too may be inhibited by a need for on-site printing on tab-like material. (Natural Resources conceivably could use the same material for large-game hunting tags or for camping permits.) A more critical issue, however, is transferring the current system to an electronic application.

Transferring hunting and fishing license sales to a kiosk operation appears more challenging than the process for motor vehicle tabs. More complexity occurs with the great variety of licenses available. With some of the specific licenses, the complexity is increased by the different eligibility qualifiers. The need to provide documentation also adds to the complexity.

As it develops its system, the department has a variety of options to consider. One is to simplify its set of offerings, either by reducing the types of licenses available or by eliminating some eligibility qualifications. Another approach to simplification is to drop some of the requirements, such as the need for a signature (although capturing a signature in a kiosk is technically possible) or the need to show some types of documentation.

Still another approach is to limit kiosk sales to more common types of licenses. The more unusual licenses, such as permanent licenses, add the most complexity to the transaction.

In both agencies, redesign of the existing process and transfer of the process to an electronic system could occur at the same time, to improve the ease and effectiveness of customer transactions. As the development work continues, it is likely that the agencies will request legislative changes to improve electronic commerce.

Appendix F contains samples of licenses and permits from these agencies and a publication outlining the various licenses and permits offered by the Department of Natural Resources.

Table 2 on the next page shows the steps involved in obtaining hunting and fishing licenses. The notes in the right column provide clarification; most explain why the step is taken.

TABLE 2. STEPS to PURCHASE HUNTING and FISHING LICENSES

Steps	Notes
1. Customer appears before an authorized issuing agent — DNR license bureau or county auditor or sub-agent.	Only one adult needs to be present when buying a family or couple license. A separate process allows the purchase of fishing licenses through the mail.
2. Agent requests proof that customer is a state resident.	Proofs of residency include any card with the customer's name and address: a state-issued vehicle driver license or personal identification card; an employee, student, military, or other identification card; a credit, club membership, hospitalization, or library card; or a notarized statement or the agent's personal knowledge.
3. If the customer is a nonresident, the agent determines:	
a. If the customer is in the military.	All service personnel stationed in Minnesota qualify as state residents, except for moose hunting. Members of service personnel's families must purchase nonresident licenses.
b. If the customer is a non-U.S. citizen married to a state resident.	A spouse of a state resident may purchase a resident license.
c. If the customer is an international exchange student.	A free angling license may be issued to any international exchange student attending school in this state.
d. If the customer is a student.	A nonresident full-time student living in the state during the fall term may obtain a resident license for fish or small game. Members of their families must obtain nonresident licenses. The students can purchase only nonresident big-game licenses.
4. If the customer is a resident, the agent determines:	
a. If the customer is in the military and stationed outside the state.	A Minnesota service person stationed outside the state does not need a license to fish or hunt small game, but needs to have furlough papers in their possession when fishing or hunting. A federal waterfowl stamp must be purchased in order to hunt waterfowl.

	To hunt deer, a state service person stationed outside the state may obtain a free archery or firearms license, tag and antlerless permit by presenting furlough papers. Free bear tags may be obtained the same way.
b. If the customer is a state veteran with proof of a 100-percent-service-connected disability.	This person may obtain an angling license or firearms or archery deer license at no fee.
c. If the customer is a senior citizen.	Starting at age 65, a resident can purchase distinct senior citizen angling and small-game licenses at a reduced fee.
d. If the customer is a railroad retiree.	Residents receiving aid under the Federal Railroad Retirement Act of 1937, 45 U.S. Code Annotated, Sec. 228b (a)5, may take fish by angling or spearing without a license. They must have evidence of their eligibility in their possession while fishing.
e. If the customer is a disabled postal worker.	Residents who are former U.S. Postal Service employees receiving disability pay under Title 5, Sec. 8337, may take fish by angling or spearing without a license. They must carry evidence of their eligibility while fishing.
f. If the customer is blind, disabled or receives supplemental security income.	A free permanent angling license is available to any resident who is blind; a recipient of supplemental security income for the aged, blind and disabled; a recipient of social security aid to the disabled under U.S. Code, Title 42, Section 416, Paragraph (i)(1) or Section 423 (d); or a recipient of workers' compensation based on a finding of total and permanent disability.
g. If the customer has a mental disability.	A resident aged 16 or older who has a mental disability, and whose parent or guardian furnishes satisfactory evidence of the disability, may obtain a permanent angling license at no fee.

h. If the customer is under age 16.

Residents under 16 are not required to buy angling or spearing licenses in order to take their legal limit of fish.

Different hunting requirements are set for residents according to age: 11 and under; 12; 13; 14; 15; and 16 and older.

5. After determining the appropriate license, the agent records the customer's first, middle, and last names and complete address on a form in a license book.

Agent may use a data recorder machine, ballpoint pen or indelible pencil, making sure that all copies are legible. When completed by hand, information must be printed clearly.

6. The agent completes all information blanks on the form, such as sex, birth date, eye color, height, and weight.

7. The customer and agent sign their names in the spaces provided.

If an employee of an agent is issuing the license, the employee must sign the agent's name and put the employee's initials after it.

8. The agent gives the customer all regulations corresponding to the license.

9. The customer pays the appropriate fee.

10. The agent gives the customer the completed license form.

11. The agent sends a copy of the license to DNR.

A subagent may be instructed to send the copy to the county auditor, who then sends it to DNR.

Agents also may issue duplicate deer licenses if the applicant submits a signed form giving the date and place of original purchase and the reason why a duplicate is needed. Other duplicate licenses can be issued only by the DNR license bureau.

If an error is made during the transaction, the license form is marked "void" and left in the license book.

The LOTTERY SYSTEM

The Minnesota State Lottery computerized statewide number games are conducted on a dedicated electronic network owned and operated by Automated Wagering International (AWI). AWI operations are located in the same building as the lottery headquarters; the system has terminals in approximately 2,000 retail outlets. During 1995, the central computer system and all retail terminals will be replaced with newer technology. The new terminals will have new capabilities, including reading magnetic strips on cards and a scanning ability to capture names, addresses, and signatures.

Both lottery and AWI officials have indicated a willingness to consider use of the network for other purposes. The lottery's paramount concern is that nothing compromise the security or integrity of the lottery applications. This does not preclude the use of the lottery network for other purposes, but does raise some limits. For example, AWI and lottery officials have more security concerns about consumer-operated terminals than about vendor-operated terminals.

OREGON EXPERIENCE

Only one state has moved toward using its lottery network for another purpose. Oregon's legislature authorized start-up funding in 1993 for that state's Department of Fish and Wildlife to use the lottery network for all hunting and fishing licenses. Part of the motivation for the project was the time lag involved in local sellers submitting fishing and hunting license receipts. Some sellers apparently were very slow to return receipts because it let them use the cash as well. This in turn increased the difficulty of field checks of licenses because enforcement officers could never know for sure if a license was current.

The Oregon lottery, which has been in operation since April 1985, has 2,300 locations, generally the same types of retail outlets used in Minnesota. These locations would have little interest in selling licenses, because the work is more labor-intensive — getting names, addresses and other pertinent information — than selling lottery tickets. The decision was made to use the outlets that traditionally have sold fishing and hunting licenses.

The first phase of the project started April 9, 1994. Lottery network wiring was extended, and separate terminals installed at 188 of the highest-volume fishing and hunting license sellers. Typically these are stores that sell hunting and fishing equipment; the terminals are operated by the same sales clerks who previously wrote out licenses by hand. The terminals and the associated central system software are different from those in the lottery outlets. The license terminals have full computer keyboards, allowing operators to enter any kind of data. The licenses print out on paper stock similar to the lottery tickets, and are then sealed in plastic before being given to the purchaser. Oregon has a wide range of licenses, including salmon fishing and limited-issue hunting licenses, distributed by lottery. All are sold through the terminals.

The rest of the outlets are continuing to use the paper system. Regardless of how successful the project turns out, there is some expectation that the licensing application system will never be completely on-line. One reason is that some locations do such minimal business that the installation expense would not be cost-effective. Another reason is that some coastal charter fishing boats leave well before 6 a.m., the time the lottery system network is turned on. The boat operators need to record sales before they leave.

Oregon's experiment is being conducted in cooperation with GTECH Corp., which operates the lottery. GTECH paid for, and owns, the license terminals. GTECH is paid for each license transaction. All lottery and license data flows on the same connecter lines to GTECH computer systems, where it is routed to the right program. Like the state's lottery receipts, the license receipts are collected by a weekly electronic fund transfer.

Because the license project is in an early stage, there has not been a full assessment. However, next year the state lottery contract will be up for rebidding; state officials anticipate that the request for proposals will require the capability for license sales.

Although it is not certain at this point that licenses will continue to be sold through the lottery network, officials are giving some consideration to what other products could be offered as well. Possibilities include campground reservations and driver license renewals. These would require yet another set of terminals in different locations, which is feasible. Another possibility is state fair admission tickets, which could be sold at the lottery outlets.

USE of the MINNESOTA LOTTERY'S NETWORK and TERMINALS

Two factors inhibit the possibility of using the Minnesota lottery system network in the same way the Oregon system is used. The first is technology: Although the systems used in the two states are similar, Minnesota's vendor reports that its technology does not support the use of a full computer keyboard, which is necessary for entering license data. AWI also doubts if the $5,000 cost of a terminal can be justified with any business other than lottery sales. A memorandum from the state lottery outlining AWI's concerns is presented in Appendix K.

The other factor is the question of whether the lottery network represents the best approach for improving customer service. It would be difficult to sell licenses at lottery outlets; licenses require a sales clerk to take time to gather necessary data, and many lottery outlets are convenience stores that emphasize fast service. Yet, establishing a separate set of terminals in other outlets does not necessarily create any new convenience for license purchases, in terms of faster transactions or more hours of availability. Because they do not require a staff person to be present, technologies such as kiosks can extend available hours. The lottery technology also is limited currently to the lottery-ticket-type of paper stock; DNR is interested in adhesive-backed stock for possible use on camping permits and game identification tags.

In Minnesota, officials of the lottery and the Department of Natural Resources have met to discuss areas where the two agencies can cooperate on meeting customer needs. Some possibilities do exist; for example, existing lottery sales outlets could offer temporary fishing licenses without much difficulty. Like Oregon, lottery outlets in Minnesota are not in a position to offer a full range of hunting and fishing licenses.

Another area of cooperation is use of the lottery terminals for gathering survey information. The lottery already is planning to use its system to create market data for its own use; it potentially could do the same for other state agencies. Officials will explore if this can complement the hunter information program now under way at DNR. This program, which is federally assisted, is an effort to build a customer data base for DNR while enabling hunters to purchase licenses through the mail.

In those same discussions, the following emerged as some of the elements in an ideal DNR electronic service:

- Offers 24-hour-a-day customer access at convenient locations.
- Complements rather than replaces other customer access such as vendors and direct mail.
- Offers a complete line of DNR licenses and other fee services including campground reservations.
- Offers other state services such as car license tabs. In addition to increasing customer service, involving other state agencies helps spread the development and installation costs.
- Uses multiple paper stocks, including at least one with tamper-proof adhesive backing.
- Creates and updates a consumer data base.
- Allows payment with either standard credit cards or possibly with a state-issued debit card that also could serve as a master fishing and hunting license, with photo identification and possibly electronic field checking capabilities.

Simply offering a complete line of DNR products is complex by itself. In 1994, DNR offered 39 types of hunting and fishing licenses, 40 types of watercraft and off-road vehicle registrations and transactions, 51 types of commercial game and fish licenses, and five types of cross-country ski passes. Given those elements, a fully automated, stand-alone system such as kiosks holds more potential for DNR than does full involvement with the lottery system. Instead of the lottery network, DNR could contract with either MNet or a private telecommunications firm. The lottery and DNR will continue to explore cooperative ventures on a limited scale, but DNR will seek other agencies to cooperate on the development of a kiosk system.

If the lottery network is to be used for other purposes, three sources of potential opposition have been identified. The first source is citizens who are opposed to the state being involved with gambling activities. From their perspective, if other state transactions become dependent on the lottery network, then it will become much more difficult to eliminate the lottery itself. The second source is county governments. Selling various kinds of licenses for the state is a revenue source for counties; depending on how the system is structured, an electronic

system operated by the state could c ıpete for that revenue. The third source of potential opposition is current license sellers, both counties and stores. As in Oregon, the immediacy of an electronic transaction would eliminate the "float" time before sellers turned in the sales receipts.

OFFICE MEMORANDUM

DATE: November 28, 1994

TO: Nancy Anderson

From: Don Masterson
Director for Operations

MINNESOTA STATE LOTTERY

Proceeds Benefit Our Natural and Economic Environment

SUBJECT: **Limiting factors in the use of MSL Network for Licensing**

The purpose of this memo is to outline the limiting factors if the Minnesota State Lottery Network is used as part of the DNR licensing system.

- Normal ticket stock must be used, however the printing can be vertical or horizontal. The stock is 3.25 inches wide with printing available across 3 inches. The length is variable.

- Only Automated Wagering International (AWI) terminals can be connected to the network. This limitation involves both security and liability issues.

- The AWI terminals have no alphabetic keyboard.

- Signatures can be captured and printed back on the ticket stock, however the original must be placed on a particular position on a specially developed form with black ink or pencil.

- The Drivers License Number and Drivers Name could be captured from the new Minnesota Drivers License and printed on the ticket stock, however no other Driver's information is available to the MSL due to privacy laws.

- Due to the cost of the AWI terminals it is unlikely that they could be placed in businesses which could not justify their existence with Lottery sales.

CONCLUSIONS

From the findings in this study, a set of general conclusions may be drawn. This chapter outlines these conclusions and is followed by a chapter with recommendations for future action regarding electronic licensing and permitting in the state.

CURRENT ACTIVITIES

- Minnesota has many ongoing and planned electronic service delivery initiatives. For example, the departments of Trade and Economic Development, Transportation, Economic Security, Administration, Public Safety, and Natural Resources have been active in or are currently exploring electronic service delivery technology.
- Continued work on Minnesota's electronic service delivery infrastructure is necessary to ensure consistent and user-friendly interfaces for Minnesota's citizens.
- With some exceptions, there appears to be little cooperation among agencies, leading to a variety of agency-specific delivery system plans. This may be the nature of high-technology introduction, given the speed with which it evolves.
- Although it is time-consuming and costly for each agency to develop and support its own electronic service delivery system, it is not feasible — at least at this time — to attempt to offer all state permits and licenses at one kiosk or service delivery point.
- It is possible to group electronic delivery services into five types: one-way dialogues; two-way information exchanges; data base searches; data base updates without financial transactions; and data base updates with financial transactions. By grouping types of services in relation to their hardware and software requirements, cost-effectiveness is increased. In general, any combination of services in a kiosk should be market-driven.
- The Government Information Access Council was created in 1994 to improve public access to government information and to improve government efficiency and effectiveness through the use of information technology.
- The technology associated with electronic delivery systems is still evolving. The environment may be characterized as ripe for exploration.
- In the past five years, great strides have been made in terms of electronic service delivery. The federal government, state and local governments, and the private sector have developed systems that efficiently and effectively bring services to their customers.
- Not all electronic service delivery efforts have been successful. For example, the Postal Service's "Postal Buddy" system failed due to poor initial planning and the locations of kiosks.

CURRENT SYSTEM

- State agencies issue hundreds of licenses and permits that vary in size, format, and cost. In addition, procedures to obtain various state licenses and permits differ greatly. Even within an agency, for one particular type of license, there may be many sub-categories. Processes for dispensing licenses and permits are often cumbersome, redundant, and confusing. These factors emphasize the need for many agencies to examine procedures for issuing licenses and permits and stress the need for overall service provision redesign.
- In some situations, state agencies would benefit from more efficient license and permit fee collection processes. For instance, the current system used for the sale of some fishing licenses allows some parties external to the state to hold collected fees for up to a month.

CRITICAL FACTORS

- In developing any service delivery system — electronic or otherwise — it is necessary to define the best methods for delivering a service, customers of the service, when the service should be available, and where customers should be able to attain the service. Before developing an electronic service delivery system, it is critical to determine the possibility of providing a particular service electronically. Electronic provision should be cost-effective, supported by its users, and easily accessible. Not all licenses and permits may be best distributed electronically.
- Successful electronic service systems are designed to meet ADA requirements as well as any special requirements of a targeted population.
- Successful electronic service delivery systems also offer users security, with sensitive and personal data kept private and confidential.
- The primary obstacles to information technology-based services are organizational and political, not technological. Today's government structures are compartmentalized, with agencies or departments handling particular pieces of business. Cooperation suffers due to fears among jurisdictions of allowing a project to be at the mercy of someone else's budget. Further, separate jurisdictions and agencies have specific missions that directly affect where kiosks or other information access points should be located.
- A growing necessity exists for government agencies and jurisdictions to work together. Space in public buildings is limited and retail establishments are not likely to give up space for several rows of kiosks.
- The largest benefits of technology-based information services require data sharing and the redesigning of government services. Experts note that agencies need to coordinate efforts with other agencies and areas of government to make kiosks cost-effective.
- To ensure the success of an electronic service delivery system, it is necessary to clearly define its mission. These systems may be used to take orders, provide information, or both. Applications should be consistent with the system's overall mission.

- An electronic service delivery system should serve a wide range of users comfortably. Individuals should be able to access all information necessary to obtain a desired service, and the information should be presented in a manner suitable to the task. User interfaces should go beyond traditional computing conventions of icons and incorporate a true understanding of the targeted end users.
- Funding for kiosk or other remote site technology should include not only the purchase price of the hardware and software or cost based on usage, but also all related development work and any future upgrades of hardware and software. From the beginning, plans for remote maintenance should be developed along with diagnostic procedures to ensure continuous operations.
- In locating kiosks or other remote site technology, it is necessary to consider users' needs, including such factors as geographic distribution, parking, main-door access, and hours of operation.
- Agencies faced with "doing more with less" should, if possible, consider replacing face-to-face services with teleservice and self-service options for simple transactions.

CURRENT DEVELOPMENTS

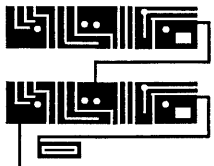
- Technology exists for carrying out most of the transactions being considered by state agencies. Information industry firms anticipate that all of the considered transactions will be feasible within the year.
- It is generally recommended that redesign of licensing processes and products precede the transfer of licensing to kiosk operations. Standardization and simplification can make the programming easier and the system more user-friendly, and save money.
- Kiosk systems already in the market vary greatly in the technologies they use; manufacturers emphasize that they are continually upgrading their products. Hardware can be purchased or leased; software can be purchased or leased separately.
- A critical distinction is the use of proprietary or non-proprietary technology. Advantages are cited for both approaches. The choice can affect how information and systems are upgraded and how easily different systems can be connected to each other.
- For existing kiosk systems, manufacturers emphasize different security mechanisms and different approaches to making the system accessible to persons with disabilities or with language or reading difficulties.

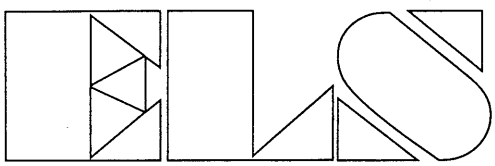
The LOTTERY SYSTEM

- Comparisons between states' lottery systems is made difficult by the variations in technology, including hardware and software. In Oregon, for example, fishing and hunting

licenses are issued electronically through the state's lottery network, but the network characteristics differ from those of the Minnesota system.

- Two significant issues relate to use of the state lottery's system: use of its terminals and use of its network.
- Although sounding simple, the issuance of state fishing licenses is complicated by the variety of fishing licenses available as well as numerous eligibility categories. Department of Natural Resource staff have stated that customers often rely on counter staff to determine the type of license for which they qualify. Counter staff are provided training along with regularly published license updates.
- Although the lottery network may not be the best way to offer all Department of Natural Resource recreational licenses, some applications may be possible, such as temporary fishing licenses. Another possible application may be the distribution of State Fair admission tickets. The lottery has expressed interest in collaborating with other state agencies in the electronic delivery of licenses and permits.
- MNet may also be able to provide network capabilities for electronic service delivery.





Electronic Licensing Systems for the Minnesota Department of Natural Resources

Appendix Three

ELS - POS Detailed Design Document (excerpts)

Table of Contents
Design Philosophy
Privilege Definition Details

Minnesota

Department of Natural Resources

ELS-POS System

DESIGN DOCUMENT

Table of Contents

Design Philosophy

Design Document

The purpose of this document is to fully describe the system design and implementation for DNR's automated license system, or ELS-POS. This document provides a basis for all parties to review the system design for content and accuracy, and agree on all aspects. It is then used for actual development and testing of the system functionality.

The goal of the detailed design is to eliminate any system design changes after this document has been approved in writing by all parties. The programmers will build, develop and test the system according to the specifications described herein.

This design document details the system that has evolved from a combination of the original RFP, addenda, the resulting Central Bank Team proposal, the final contract between DNR and CB, and the design sessions that included a wide range of participants. All decisions that have been made through the design process are reflected in this document, insofar as they affect the ultimate product delivered to DNR. As far as possible, system design and development information from the various documents has been merged into this design document to simplify review and reference. However, this document does refer to additional information and attachments to insure maximum clarity and understanding.

Upon accepting this design document, the timeframes of the deliverables and implementation dates will be recalculated to handle the scope of work outlined here. It is important to understand that pre-design schedules and critical paths may be adjusted to best meet the needs of the design, development and planned implementation. The **Project Plan** included with this document (in the **Attachments** section) represents the schedule anticipated when the contract was signed.

Notes: all years will be denoted in this document simply as "YY"; in all systems developed and implemented for MDNR, years will be 4-digit "CCYY" for all calculations and printing;

Privilege Definition Details

PRIVILEGE INFORMATION

Privilege Type Code	three-digit numeric code that identifies the privilege;
Privilege Name	25-character description of the privilege (displayed and printed at POS);
Privilege Fee	total amount charged to the customer for the privilege (includes MDNR amount + agent commission); *$xxxx.cc*
Agent Commission	amount retained by the agent for selling a privilege (subtracted from Privilege Fee and retained by agent); *$x.cc* *[temporary solution to the agent commission for the Trout Stamp; leave agent fee as $0.00 (license fee as $8.50) for pilot deployment and re-assess for statewide deployment;]*
Duplicate Privilege Fee	total amount charged to the customer for the duplicate privilege; *$0000.00 = no duplicate privilege allowed* *$xxxx.cc*
Duplicate Agent Comm	amount retained by the agent for selling a duplicate privilege; *$x.cc*
Privilege Class Code	determines at which agent locations this privilege type may be sold; *A = tier 1 privilege type* *B = tier 2 privilege type* *C = DNR-only privilege type* *D =free privileges*
Residency Allowance	determines whether a privilege can be purchased by residents and or non-residents; *R = residents (or non-residents who qualify for resident prices)* *N = non-residents* *B = both*
Hunt List Indicator	determines that a privilege type should display on the HUNT list during the license sale process on the POS (only for the selected residency); *1 = display on this list* *0 = do NOT display on this list*
Fish List Indicator	determines that a privilege type should display on the FISH list during the license sale process on the POS; (only for the selected residency); *1 = display on this list* *0 = do NOT display on this list*
Other List Indicator	determines that a privilege type should display on the OTHER list during the license sale process on the POS; (only for the selected residency); *1 = display on this list* *0 = do NOT display on this list*
Open Date	first day during the license year that this privilege is available for sale (default = Feb 18th); *MMDDYYYY*
Close Date	last day during the license year that the license is available for sale (default = Feb 28th); *MMDDYYYY*
Effective Date	date upon which this privilege type becomes effective for use; *MMDDYYYY*

Expiration Date	expiration date to be printed on the license document for this privilege; *02/28 = end of normal license year (Feb 28th, nothing special printed)* *06/30 = end of alternate privilege cycle (print additional expiration date line on license)* *H#### = calculate the expiration date/time using the number of hours assigned, from effective date/time of privilege* *D#### = calculate the expiration date using the number of days assigned, from effective date/time of privilege*
Minimum Age	denotes minimum age to purchase this privilege;
Maximum Age	denotes maximum age to purchase this privilege;

PRIVILEGE DEPENDENCIES

Purchase Limitations	denotes that the purchase of this privilege type *is dependent upon* the existence of one or more pre-existing privileges on the customer record (or within the same transaction request); input the privilege code(s) required in order to purchase this privilege type; **for instance**, in order to purchase an archery management permit, the customer must already have an archery deer privilege;
Purchase Exclusions	denotes that the purchase of this privilege type *is to be denied* based on the existence of one or more pre-existing privileges on the customer record (or within the same transaction request); input the privilege code(s) that could potentially deny the purchase of this privilege type; **for instance**, purchase of a trip fishing privilege should be denied if the customer already has an annual fishing privilege;
Multiples Indicator	denotes which privilege types are allowed to be purchased multiple times during a license year (March 1st through February 28th) by a single customer; **for instance**, a customer should be able to purchase multiple trip privileges during the license year; *0 = can NOT be purchased multiple times (rejected by authorizing host)* *1 = can be purchased multiple times*
Available in ATP	denotes which privilege types are available to be authorized in ATP mode (terminal authorization instead of host authorization); **for instance**, you may choose to not enable certain privilege types in ATP mode due to a large dollar amount, the need to require certain authorization criteria be met, etc.; *0 = can NOT be authorized in ATP mode (rejected by POS application)* *1 = can be authorized in ATP mode*
Chart of Accounts Code	the cost center for the funds generated by the sale of each privilege type and the percentage to each code for a privilege type; further information will be provided by MDNR when needed, knowing that the Chart of Accounts code can be adjusted at any time through the admin screens, on the privilege definition; (more from TK & AA) *CCCC-PPP, where CCCC is the cost code and PPP is the percentage*
Data Transfer to MDNR	identifies which privileges require information to be transmitted to MDNR for further processing (HIP Certification data, angler survey responses, trapping tags, stamps fulfillment, specialty licenses for fulfillment and mailing, etc.); *1 = enable data transfer of records with this privilege type* *0 = do NOT enable data transfer*

Privilege Information: | **Privilege Dependencies:**

Privilege Type Code	Privilege Name	Privilege Fee	Agent Commission	Duplicate Privilege Fee	Duplicate Agent Commission	Privilege Class Code	Residency Allowance	Hunt List	Fish List	(removed)	Other List	Open Date	Close Date	Effective Date	Expiration Date	Minimum Age	Maximum Age	Purchase Limitations	Purchase Exclusions	Multiples Indicator	Available in ATP	Chart of Accounts Code	Data Transfer to MDNR
001	Annual Indiv XC Ski Pass	0010.00	1.00	0002.50	0.50	A	B	0	0	0	1	08/01/99	04/30/00	07/01/99	06/30	16	99		005	0	1	171	0
003	Daily XC Ski Pass	0003.00	1.00	0000.00	0.00	A	B	0	0	0	1	08/01/99	04/30/00	07/01/99	D001	16	99		001,005	1	1	171	0
005	3 Yr Indiv XC Ski Pass	0025.00	1.00	0002.50	0.50	A	B	0	0	0	1	08/01/99	04/30/00	07/01/99	Y003	16	99		001	0	1	171	0
023	State Snowmobile Trail	0016.00	1.00	0002.50	0.50	A	B	0	0	0	1	08/01/99	04/30/00	11/01/99	04/30	00	99			1	1	121	0
100	Res Sen Cit Small Game	0010.00	1.00	0002.50	0.50	A	R	1	0	0	0	02/18/99	02/29/00	03/01/99	02/28	65	99		211,216,217,241	0	1	133	1
107	Annual Special Angling	0000.00	1.00	0000.50	0.50	D	R	0	0	0	0	02/18/99	02/29/00	03/01/99	02/28	16	64		108	0	1	147	0
108	Permanent Angling	0000.00	1.00	0000.50	0.50	C	R	0	0	0	0	02/18/99	02/29/00	03/01/99	02/28	16	99			0	1	147	0
110	24-Hour Angling	0009.00	1.00	0002.50	0.50	A	B	0	1	0	0	02/18/99	02/29/00	03/01/99	H024	00	99		107,111,112,114,121,124,216,217	1	1	146	0
111	Res Individual Angling	0016.00	1.00	0002.50	0.50	A	R	0	1	0	0	02/18/99	02/29/00	03/01/99	02/28	16	64		107,108	0	1	147	0
112	Res Combination Angling	0021.50	1.00	0002.50	0.50	A	R	0	1	0	0	02/18/99	02/29/00	03/01/99	02/28	16	99		107,111,114,216,217,108	0	1	148	0
113	Res Spear from Dark House	0016.00	1.00	0002.50	0.50	A	R	0	1	0	0	02/18/99	02/29/00	03/01/99	02/28	16	64			0	1	149	0
114	Res Sen Cit Angling	0005.50	0.00	0002.50	0.50	A	R	0	1	0	0	02/18/99	02/29/00	03/01/99	02/28	65	99		107,108,111,112,216,217	0	1	150	0
115	Res White/Tulibee/Herring	0010.00	1.00	0002.50	0.50	A	R	0	1	0	0	02/18/99	02/29/00	03/01/99	02/28	16	99			0	1	151	0
116	Nonres Shelter	0032.50	1.00	0002.50	0.50	A	N	0	1	0	0	02/18/99	02/29/00	03/01/99	02/28	00	99			1	1	154	0
117	Nonres Shelter 7-Day	0019.50	1.00	0002.50	0.50	A	N	0	1	0	0	02/18/99	02/29/00		D007	00	99			1	1	155	0
119	Res Dark House/Shelter	0011.00	1.00	0002.50	0.50	A	R	0	1	0	0	02/18/99	02/29/00	03/01/99	02/28	00	99			1	1	152	0
120	Res Dark House (Rental)	0024.00	1.00	0002.50	0.50	A	R	0	1	0	0	02/18/99	02/29/00	03/01/99	02/28	00	99			1	1	153	0
121	Nonres Individual Angling	0032.00	1.00	0002.50	0.50	A	N	0	1	0	0	02/18/99	02/29/00	03/01/99	02/28	00	99		124	0	1	156	0
124	Nonres Family Angling	0042.50	1.00	0002.50	0.50	A	N	0	1	0	0	02/18/99	02/29/00	03/01/99	02/28	00	99			0	1	157	0
125	NR 14-Day Couple Angling	0033.00	1.00	0002.50	0.50	A	N	0	1	0	0	02/18/99	02/29/00		D014	00	99		121,124	1	1	158	0
126	Nonres 7-Day Angling	0022.50	1.00	0002.50	0.50	A	N	0	1	0	0	02/18/99	02/29/00		D007	00	99		121,124	1	1	159	0
127	Nonres 72-Hour Angling	0019.00	1.00	0002.50	0.50	A	N	0	1	0	0	02/18/99	02/29/00		H072	00	99		121,124	1	1	160	0
128	Trout Stamp	0008.50	0.00	0002.50	0.50	A	B	0	1	0	1	02/18/99	02/29/00	03/01/99	02/28	00	99			1	1	169%90 170%10	0
210	Res Youth Deer	0006.00	1.00	0005.75	0.75	A	R	1	0	0	0	08/01/99		03/01/99	02/28	12	15		212,215	0	1	180	0
211	Res Small Game	0015.00	1.00	0002.50	0.50	A	R	1	0	0	0	02/18/99	02/29/00	03/01/99	02/28	00	64		100,216,241	0	1	134	1
212	Res Deer Firearm	0023.00	1.00	0005.75	0.75	A	R	1	0	0	0	08/01/99		03/01/99	02/28	12	99		210,215,232,242	0	1	127	1

Privilege Information: | **Privilege Dependencies:**

Privilege Type Code	Privilege Name	Privilege Fee	Agent Commission	Duplicate Privilege Fee	Duplicate Agent Commission	Privilege Class Code	Residency Allowance	Hunt List	Fish List	(removed)	Other List	Open Date	Close Date	Effective Date	Expiration Date	Minimum Age	Maximum Age	Purchase Limitations	Purchase Exclusions	Multiples Indicator	Available in ATP	Chart of Accounts Code	Data Transfer to MDNR
213	Res Deer Archery	0023.00	1.00	0005.75	0.75	A	R	1	0	0	0	08/01/99		03/01/99	02/28	12	99		233,243	0	1	128	0
214	Res Regular Trapping	0019.00	1.00	0002.50	0.50	A	R	1	0	0	0	02/18/99	02/29/00	03/01/99	02/28	18	99			0	1	132	1
215	Res MultiZone Buck	0045.00	1.00	0005.75	0.75	A	R	1	0	0	0	08/01/99		03/01/99	02/28	12	99		210,212,232,242	0	1	130	0
216	Res Individual Sports	0025.00	1.00	0002.50	0.50	A	R	1	0	0	0	02/18/99	02/29/00	03/01/99	02/28	16	64		111,112,211,241	0	1	144	1
217	Res Combination Sports	0032.50	1.00	0002.50	0.50	A	R	1	0	0	0	02/18/99	02/29/00	03/01/99	02/28	16	99		111,112,211,241	0	1	145	1
218	Res Junior Trapping	0006.50	1.00	0002.50	0.50	A	R	1	0	0	0	02/18/99	02/29/00	03/01/99	02/28	13	17			0	1	132	1
221	Nonres Small Game	0061.00	1.00	0002.50	0.50	A	N	1	0	0	0	02/18/99	02/29/00	03/01/99	02/28	16	99			0	1	140	1
222	Nonres Deer Firearm	0111.00	1.00	0005.75	0.75	A	N	1	0	0	0	08/01/99		03/01/99	02/28	12	99		235	0	1	135	1
223	Nonres Deer Archery	0111.00	1.00	0005.75	0.75	A	N	1	0	0	0	08/01/99	12/29/99	03/01/99	02/28	12	99			0	1	136	0
224	Res NoQuota Bear	0034.00	1.00	0005.75	0.75	A	R	1	0	0	0	07/01/99		03/01/99	02/28	12	99		660,663	0	1	131	0
225	Nonres NoQuota Bear	0166.00	1.00	0005.75	0.75	A	N	1	0	0	0	07/01/99		03/01/99	02/28	12	99		661	0	1	131	0
226	Migratory WaterfowlStamp	0005.00	0.00	0002.50	0.50	A	B	1	0	0	1	02/18/99	02/29/00	03/01/99	02/28	00	99			0	1	165%90 166%10	1
227	HIP Certification	0000.00	0.00	0000.00	0.00	A	B	1	0	0	0	02/18/99	02/29/00	03/01/99	02/28	00	99			1	1		1
228	Nonres Furbearer Hunting	0138.50	1.00	0002.50	0.50	A	N	1	0	0	0	02/18/99	02/29/00	03/01/99	02/28	12	99			0	1	139	0
229	Pheasant Stamp	0005.00	0.00	0002.50	0.50	A	B	0	1	0	1	02/18/99	02/29/00	03/01/99	02/28	00	99			1	1	167%90 168%10	1
232	Military Deer Firearm	0001.00	1.00	0000.75	0.75	D	R	0	0	0	0	08/01/99	*	03/01/99	02/28	16	99		212,215	0	1	127	0
233	Military Deer Archery	0001.00	1.00	0000.75	0.75	D	R	0	0	0	0	08/01/99	12/31/99	03/01/99	02/28	16	99		213	0	1	128	0
235	Nonres MultiZone Buck	0221.00	1.00	0005.75	0.75	A	N	1	0	0	0	08/01/99	02/29/00	02/01/99	2/28	12	99		222	0	1	137	0
241	Disabled Vet Small Game	0001.00	1.00	0000.50	0.50	D	R	0	0	0	0	02/18/99	02/29/00	03/01/99	02/28	16	99		211,216,217	0	0	???	1
242	Disabled Vet DeerFirearm	0001.00	1.00	0000.75	0.75	D	R	0	0	0	0	08/01/99	*	03/01/99	02/28	16	99		212,215,232,243	0	0	127	1
243	Disabled Vet DeerArchery	0001.00	1.00	0000.75	0.75	D	R	0	0	0	0	08/01/99	*	03/01/99	02/28	16	99		213,233,242	0	0	128	1
331	Wild Rice Harvester	0013.50	1.00	0002.50	0.50	A	R	0	0	0	1	07/01/99	02/29/00	03/01/99	2/28	16	99			0	1	172	0
340	Res Firearm Mgmt Deer	0012.00	1.00	0005.75	0.75	A	R	1	0	0	0	10/15/99		03/01/99	2/28	12	99	212	342	0	1	129	0
341	Nonres Firearm Mgmt Deer	0056.00	1.00	0005.75	0.75	A	N	1	0	0	0	10/15/99		03/01/99	2/28	12	99	222		0	1	185	0
342	Landowner Mgmt FirearmDr	0001.00	1.00	0000.75	0.75	A	R	1	0	0	0	10/15/99		03/01/99	2/28	12	99	212	340	0	1	000	0
420	Res Management Archery	0012.00	1.00	0005.75	0.75	A	R	1	0	0	0	08/01/99	12/29/99	03/01/99	2/28	12	99	213		0	1	181	0
421	Nonres Management Archery	0056.00	1.00	0005.75	0.75	A	N	1	0	0	0	08/01/99	12/29/99	03/01/99	2/28	12	99	223		0	1	183	0
430	Res Intensive Harvest	0012.00	1.00	0005.75	0.75	A	R	1	0	0	0	08/01/99	12/29/99	03/01/99	2/28	12	99	210,212,213,215		1	1	182	0
431	Nonres Intensive Harvest	0056.00	1.00	0005.75	0.75	A	N	1	0	0	0	08/01/99	12/29/99	03/01/99	2/28	12	99	222,223,235		1	1	184	0

Privilege Information: | **Privilege Dependencies:**

Privilege Type Code	Privilege Name	Privilege Fee	Agent Commission	Duplicate Privilege Fee	Duplicate Agent Commission	Privilege Class Code	Residency Allowance	Hunt List	Fish List	(removed)	Other List	Open Date	Close Date	Effective Date	Expiration Date	Minimum Age	Maximum Age	Purchase Limitations	Purchase Exclusions	Multiples Indicator	Available in ATP	Chart of Accounts Code	Data Transfer to MDNR
520	Goose Permit	0003.00	0.00	0002.50	0.50	A	B	1	0	0	0	07/01/99		03/01/99	02/28	00	99			1	1	194	1
600	Spring Turkey Application	0003.00	0.00	----.--	-.--	A	B	0	0	1	0					12	99			0	1	125	1
610	Res Spring Turkey License	0016.00	0.00	0002.50	0.50	A	R	1	0	0	0			03/01/99	2/28	12	99			0	0	193	0
611	Nonres Spring Turkey Lic	0056.00	0.00	0002.50	0.50	A	N	1	0	0	0			03/01/99	2/28	12	99			0	0	193	0
612	Turkey Stamp	0005.00	0.00	0002.50	0.50	A	B	1	0	0	1		2/28/00	03/01/99	2/28	00	99			1	1	197%90 198%10	1
620	Moose Application	0003.00	0.00	----.--	-.--	A	B	0	0	1	0					16	99			0	1	124	1
621	Moose License	0276.00	1.00	0005.75	0.75	C	R	0	0	0	0	07/15/99				16	99			0	1	195	0
640	Fall Turkey Application	0003.00	0.00	----.--	-.--	A	B	0	0	1	0					12	99			0	1	125	1
650	Res Fall Turkey License	0016.00	0.00	0002.50	0.50	A	R	1	0	0	0					12	99			0	0	193	0
651	Nonres Fall Turkey Lic	0056.00	0.00	0002.50	0.50	A	N	1	0	0	0					12	99			0	0	193	0
660	Resident Bear License	0034.00	1.00	0005.75	0.75	A	R	1	0	0	0	06/01/99		03/01/99	02/28	12	99		224,663	0	0	131	0
661	Nonres Bear License	0166.00	1.00	0005.75	0.75	A	N	1	0	0	0	06/01/99		03/01/99	02/28	12	99		225	0	0	131	0
662	Bear Application	0000.00	0.00	----.--	-.--	A	B	0	0	1	0					12	99			0	1	000	1
663	Military Bear	0001.00	1.00	0000.75	0.75	D	R	0	0	0	0	06/01/99		03/01/99	02/28	16	99		224,660	0	1	131	0
665	Antlerless Lottery	0000.00	0.00	----.--	-.--	A	B	0	0	1	0	08/01/99		03/01/99	2/28	12	99	212,222		0	1	000	0
995	Duplicate Privilege	0000.00	0.00	0000.00	0.00	A	B	0	0	0	0	02/18/99	02/29/00	03/01/99	02/28	00	99			1	0		0

ADDITIONAL REQUIRED PROMPTS / DATA

Start Date — prompt for a start date for this privilege type; this date must be on or after the first day of license sales for the license year (2/18) AND on or before the last day of the license year (2/17);
1 = display this prompt
0 = do NOT display this prompt

Start Time — prompt for a start time for this privilege type; for privileges that require this data to be input, the system will allow entry of a start time in the future (compared to the system time) and up to one hour in the past (at 12:00 noon, the system will allow a start time of 11:01am on the same day);
1 = display this prompt
0 = do NOT display this prompt

Firearm Safety — prompt for proof of firearm safety (for residents) OR firearm safety number/state (for non-residents) for this privilege type, only if customer was born after December 31, 1979;
1 = display this prompt
0 = do NOT display this prompt

HIP Certification Prompts — prompt for HIP Certification series of questions for this privilege type;
1 = display this prompt
0 = do NOT display this prompt

Hunting Zone — prompt for zone (2 digit alphanumeric) for this privilege type;
1 = display this prompt
0 = do NOT display this prompt

Hunting Area — prompt for area (alphanumeric) for this privilege type;
4 = display this prompt with 4-digit input allowed
3 = display this prompt with 3-digit input allowed
2 = display this prompt with 2-digit input allowed
0 = do NOT display this prompt

~~Antlerless/Special Hunt~~ — ~~prompt for distinction between antlerless permit, special hunt or neither for this deer privilege type; if antlerless is selected (and zone NOT "ML"), include additional prompt for Area and option for Management Permit; if special hunt is selected, include additional prompt for Area;~~
~~*1 = display this prompt*~~
~~*0 = do NOT display this prompt*~~

Landowner/Tenant — prompt for distinction between landowner, tenant (with input of landowner name and landowner phone) or neither for this application privilege type;
1 = display this prompt
0 = do NOT display this prompt

Cnty/Twp/Rng/Sec/Acr — prompt for input of codes for county (2 bytes), township (3 bytes), range (2 bytes), section (2 bytes), and acres (4 bytes) for a landowner or tenant application privilege type;
1 = display these prompts
0 = do NOT display these prompts

Group ID for Lotteries — *if Hunting Area is greater than "900"*, prompt for Group ID Number (7 digit numeric) assigned to initial buyer for this privilege type; **for instance**, moose, deer, turkey and/or bear allow for party applications for the drawings;
1 = display this prompt
0 = do NOT display this prompt

Spousal Data Entry — prompt for Spouse Name, DOB, Height, Weight, Eyes and Gender for this privilege type;
1 = display these prompts
0 = do NOT display these prompts

Small Game Option — prompt for samll game to be assigned to buyer or spouse;
1 – display this prompt
0 – do NOT display this prompt

~~Sales Tax~~	~~prompt for potential additional Sales Tax amount for this privilege type (Tier 2 only);~~ ~~*1 = display this prompt*~~ ~~*0 = do NOT display this prompt*~~
Leave Papers	prompt licensing agent to confirm home-on-leave papers for military free privileges (232, 233); this data is captured at the POS and recorded at the host, but is not searchable at the host (it is only kept in the Audit Log); *1 = display this prompt* *0 = do NOT display this prompt*
DV Papers	prompt licensing agent to confirm disabled veteran papers from USVA for free privileges (242, 243); this data is captured at the POS and recorded at the host, but is not searchable at the host (it is only kept in the Audit Log); *1 = display this prompt* *0 = do NOT display this prompt*
Free License	prompt licensing agent to confirm that this customer meets the requirements for a free privilege; this data is captured at the POS and recorded at the host, but is not searchable at the host (it is only kept in the Audit Log); *1 = display this prompt* *0 = do NOT display this prompt*
~~Angler Survey~~	~~display one screen prompt (2 25-character lines) with Y/N response for this privilege type; used to determine which anglers should receive a mail-out survey;~~ ~~*1 = display this prompt*~~ ~~*0 = do NOT display this prompt*~~
Trapping Prompts	display two screen prompts to determine if otter tags and/or fisher/marten tags are desired for this privilege type; used to determine which trappers should receive tags via mail from MDNR; *1 = display this prompt* *0 = do NOT display this prompt*

PRINTING REQUIREMENTS

Privilege on Receipt	print this privilege type on the receipt (privileges, applications, endorsements);
Application Info on Receipt	landowner/tenant information for application processing - zone, area, county, township, range, section, acres;
Privilege on License Doc	print this privilege type on the license document (privileges, permits); file name is **MN_LIC.DMX**
Generic Kill Tag/Site Tag	print a kill tag (see paper version, with zone) for this privilege type, with time of kill, AM/PM, month (4 - 5, 9 – 12), date (1 – 31), sex, and large letters (see next field); file name is **MN_SPOUS.DMX**
Large Letters for Kill Tag	print these letters oversized on kill tag for easy identification; **for instance**, "FD" for firearm deer or "AD" for archery deer,
Spring Turkey Kill Tag	print a kill tag (see paper version, with zone) for this privilege type, with time of kill, AM/PM, month (4 – 5, 9 – 12), date (1 – 31), bearded turkey;
Fall Turkey Kill Tag	print a kill tag (see paper version, with zone) for this privilege type, with time of kill, AM/PM, month (9 – 12), date (1 – 31), sex;
Registration Slip	print the designated registration slip for this privilege type: A = firearm/archery deer (**MN_DEERS.DMX**) B = multi-zone buck (**MN_MZONE.DMX**) C = management archery deer (**MN_MASLP.DMX**) D = firearm management deer (**MN_MGMTS.DMX**) E = intensive harvest deer (**MN_INTSV.DMX**) F = non-quota bear (**MN_BEARS.DMX**) G = quota bear (**MN_QBEAR.DMX**)

H = moose (**MN_MOOSE**)
I = spring and fall turkey (**MN_TURKY**)

Snowmobile Pass — includes begin/end date, amount, privilege name, on ½ square; file name is **MN_SNOWM.DMX**

Dark House Tag — print a dark house tag for this privilege type; file name is **MN_SHLTR.DMX**

PRINTING ADDITIONAL TAG LINES

"HIP Certified" — print this indicator, indicating that this customer was HIP certified in this (or a previous) transaction, on the license document for this privilege type;

"Spouse Information Line" — print this tag line, indicating the spouse/individual with whom this privilege is granted, on the license document for this privilege type;

"Eff. From Date Thru Date" — print this tag line, indicating the effective from and effective through dates, on the license document for this privilege type;
[removed this "1" for many deer and bear privileges, per Tom at MDNR]

"Eff. From Date and Time" — print this tag line, indicating the effective start date and time, on the license document for this privilege type;

"See Regs for Areas/Dates" — print this tag line, indicating that additional regulations exist for use of this privilege, on the license document for this privilege type;

	Additional Required Prompts/Data:																	**Printing Requirements:**										**Tag Lines:**				
Privilege Type Code	Start Date	Start Time	Firearm Safety	HIP Certification Questions	Hunting Zone	Hunting Area	Antlerless/Special Hunt	Landowner/Tenant	Cty/Twp/Rng/Sec/Acr	Group ID for Lotteries	Spousal Data Entry	Small Game Option	~~Sales Tax~~	Leave Papers	DV Papers	Angler Survey	Trapping Prompts	Privilege on Receipt	Application Data on Receipt	Privilege on License Doc	Generic Kill Tag/Site Tag	Large Letters For Kill Tag	Spring Turkey Kill Tag	Fall Turkey Kill Tag	Registration Slip	Spouse Copy of License	Snowmobile Pass	Dark House/Shelter Tag	HIP Certified	Spouse Information Line	Effective From/Through	Effective From Date/Time	See Regs for Areas/Dates
001	0	0	0	0	0	0	0	0	0	0	0	0	~~0~~	0	0	0	0	1	0	1	0		0	0	0	0	0	0	0	0	1	0	0
003	1	0	0	0	0	0	0	0	0	0	0	0	~~0~~	0	0	0	0	1	0	1	0		0	0	0	0	0	0	0	0	1	0	0
005	0	0	0	0	0	0	0	0	0	0	0	0	~~0~~	0	0	0	0	1	0	1	0		0	0	0	0	0	0	0	0	1	0	0
023	0	0	0	0	0	0	0	0	0	0	0	0	~~0~~	0	0	0	0	1	0	0	0		0	0	0	0	1	0	0	0	1	0	0
100	0	0	0	1	0	0	0	0	0	0	0	0	~~0~~	0	0	0	0	1	0	1	0		0	0	0	0	0	0	1	0	0	0	0
107	0	0	0	0	0	0	0	0	0	0	0	0	~~0~~	0	**	1	0	1	0	1	0		0	0	0	0	0	0	0	0	0	0	1
108	0	0	0	0	0	0	0	0	0	0	0	0	~~0~~	0	**	1	0	1	0	1	0		0	0	0	0	0	0	0	0	0	0	1
110	1	1	0	0	0	0	0	0	0	0	0	0	~~0~~	0	0	1	0	1	0	1	0		0	0	0	0	0	0	0	0	0	1	0
111	0	0	0	0	0	0	0	0	0	0	0	0	~~0~~	0	0	1	0	1	0	1	0		0	0	0	0	0	0	0	0	0	0	0
112	0	0	0	0	0	0	0	0	0	0	1	0	~~0~~	0	0	1	0	1	0	1	0		0	0	0	1	0	0	0	1	0	0	0
113	0	0	0	0	0	0	0	0	0	0	0	0	~~0~~	0	0	0	0	1	0	1	0		0	0	0	0	0	0	0	0	0	0	0
114	0	0	0	0	0	0	0	0	0	0	0	0	~~0~~	0	0	1	0	1	0	1	0		0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	~~0~~	0	0	0	0	1	0	1	0		0	0	0	0	0	0	0	0	0	0	0
116	0	0	0	0	0	0	0	0	0	0	0	0	~~0~~	0	0	0	0	1	0	1	0		0	0	0	0	0	1	0	0	0	0	0
117	1	0	0	0	0	0	0	0	0	0	0	0	~~0~~	0	0	0	0	1	0	1	0		0	0	0	0	0	1	0	0	1	0	0
119	0	0	0	0	0	0	0	0	0	0	0	0	~~0~~	0	0	0	0	1	0	1	0		0	0	0	0	0	1	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0	0	0	0	~~0~~	0	0	0	0	1	0	1	0		0	0	0	0	0	1	0	0	0	0	0
121	0	0	0	0	0	0	0	0	0	0	0	0	~~0~~	0	0	1	0	1	0	1	0		0	0	0	0	0	0	0	0	0	0	0
124	0	0	0	0	0	0	0	0	0	0	1	0	~~0~~	0	0	1	0	1	0	1	0		0	0	0	1	0	0	0	1	0	0	0
125	1	0	0	0	0	0	0	0	0	0	1	0	~~0~~	0	0	1	0	1	0	1	0		0	0	0	1	0	0	0	1	1	0	0
126	1	0	0	0	0	0	0	0	0	0	0	0	~~0~~	0	0	1	0	1	0	1	0		0	0	0	0	0	0	0	0	1	0	0
127	1	1	0	0	0	0	0	0	0	0	0	0	~~0~~	0	0	1	0	1	0	1	0		0	0	0	0	0	0	0	0	0	1	0
128	0	0	0	0	0	0	0	0	0	0	0	0	~~0~~	0	0	0	0	1	0	1	0		0	0	0	0	0	0	0	0	0	0	0
10	0	0	1	0	1	0	0	0	0	0	0	0	~~0~~	0	0	0	0	1	0	1	0		0	0	0	0	0	0	0	0	1	0	0

	Additional Required Prompts/Data:																	Printing Requirements:										Tag Lines:				
Privilege Type Code	Start Date	Start Time	Firearm Safety	HIP Certification Questions	Hunting Zone	Hunting Area	Antlerless/Special Hunt	Landowner/Tenant	Cty/Twp/Rng/Sec/Acr	Group ID for Lotteries	Spousal Data Entry	Small Game Option	~~Sales Tax~~	Leave Papers	DV Papers	Angler Survey	Trapping Prompts	Privilege on Receipt	Application Data on Receipt	Privilege on License Doc	Generic Kill Tag/Site Tag	Large Letters For Kill Tag	Spring Turkey Kill Tag	Fall Turkey Kill Tag	Registration Slip	Spouse Copy of License	Snowmobile Pass	Dark House/Shelter Tag	HIP Certified	Spouse Information Line	Effective From/Through	Effective From Date/Time	See Regs for Areas/Dates
211	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0		0	0	0	0	0	0	1	0	0	0	0
212	0	0	1	0	1	3	1	1	1	1	0	0	0	0	0	0	0	1	1	0	1	RF	0	0	A	0	0	0	0	0	0	0	1
213	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	RA	0	0	A	0	0	0	0	0	0	0	1
214	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0		0	0	0	0	0	0	0	0	0	0	0
215	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	RZ	0	0	B	0	0	0	0	0	0	0	1
216	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0		0	0	0	0	0	0	1	0	0	0	0
217	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	1	0	1	0	1	0		0	0	0	1	0	0	1	1	0	0	0
218	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0		0	0	0	0	0	0	0	0	0	0	0
221	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0		0	0	0	0	0	0	1	0	0	0	0
222	0	0	1	0	1	3	1	0	0	1	0	0	0	0	0	0	0	1	1	0	1	NF	0	0	A	0	0	0	0	0	0	0	1
223	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	NA	0	0	A	0	0	0	0	0	0	0	1
224	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	RB	0	0	F	0	0	0	0	0	0	0	1
225	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	NB	0	0	F	0	0	0	0	0	0	0	1
226	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0		0	0	0	0	0	0	0	0	0	0	0
227	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0		0	0	0	0	0	0	0	0	0	0	0
228	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0		0	0	0	0	0	0	0	0	0	0	0
229	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0		0	0	0	0	0	0	0	0	0	0	0
232	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	RF	0	0	A	0	0	0	0	0	0	0	1
233	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	RA	0	0	A	0	0	0	0	0	0	0	1
235	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	NZ	0	0	B	0	0	0	0	0	0	0	1
241	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0		0	0	0	0	0	0	1	0	0	0	0
242	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	RF	0	0	A	0	0	0	0	0	0	0	1
243	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	RA	0	0	A	0	0	0	0	0	0	0	1
331	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0		0	0	0	0	0	0	0	0	0	0	1
340	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	RM	0	0	D	0	0	0	0	0	0	0	1
341	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	NM	0	0	D	0	0	0	0	0	0	0	1
342	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	PM	0	0	D	0	0	0	0	0	0	0	1
420	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	MA	0	0	C	0	0	0	0	0	0	0	1
421	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	MA	0	0	C	0	0	0	0	0	0	0	1
430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	RI	0	0	E	0	0	0	0	0	0	0	1
431	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	NI	0	0	E	0	0	0	0	0	0	0	1
520	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0		0	0	0	0	0	0	0	0	0	0	1
600	0	0	1	0	0	4	0	1	1	1	0	0	0	0	0	0	0	1	1	0	0		0	0	0	0	0	0	0	0	0	0	0
610	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	ST	1	0	I	0	0	0	0	0	1	0	0
611	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	ST	1	0	I	0	0	0	0	0	1	0	0
612	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0		0	0	0	0	0	0	0	0	0	0	0
620	0	0	1	0	0	2	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0		0	0	0	0	0	0	0	0	0	0	0
621	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	MO	0	0	H	0	0	0	0	0	0	0	1
640	0	0	1	0	0	4	0	1	1	1	0	0	0	0	0	0	0	1	1	0	0		0	0	0	0	0	0	0	0	0	0	0
650	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	FT	0	1	I	0	0	0	0	0	1	0	0
651	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	FT	0	1	I	0	0	0	0	0	1	0	0
660	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	QB	0	0	G	0	0	0	0	0	0	0	1
661	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	QB	0	0	G	0	0	0	0	0	0	0	1
662	0	0	1	0	0	3	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0		0	0	0	0	0	0	0	0	0	0	0
663	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	MB	0	0	F	0	0	0	0	0	0	0	1
665	0	0	0	0	1	3	1	1	1	1	0	0	0	0	0	0	0	1	1	0	0		0	0	0	0	0	0	0	0	0	0	0
995	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0		0	0	0	0	0	0	0	0	0	0	0