

Approved 3-23-92
Date

MINUTES OF THE House COMMITTEE ON Computers, Communications & Technology

George Dean

The meeting was called to order by _____
Chairperson

12:00 Noon on February 27, 1992 in room 529-S of the Capito

All members were present except:

- Representative McKechnie
- Representative Kline
- Representative Patrick
- Representative Rock

Committee staff present:

- Julian Efird - Research
- Donna Stadel - Committee Secretary

Conferees appearing before the committee:

- Julian Efird - Research
- Ralph Decker - Kansas Lottery
- John Roberts - Director of Administration
- Frank Calvillo - Kansas Lottery
- Gary Saville - Kansas Lottery

Others attending : See attached list.

Chairman Dean called the meeting to order at 12:10 P.M. with Julian Efird giving an overview and background of Lottery events. He stated, at the end of the 1991 session, the governor's budget included proposal for a new computer system, both hardware and software. The proposal, because it came late in the session, was rejected and a moratorium was placed on their acquired new hardware and software through this fiscal year. Also last year, the lottery prepared and sent to DISC, as part of its' data processing planning process, their management plan for information services. This plan included acquisition of both hardware and software for FY 93. The proposal was included in their budget, recommended by the governor in the FY 93 budget, and when it got to Senate Ways and Means sub-committee, was recommended to be pulled out of the budget. The information the sub-committee reviewed is available today for review by the committee.

The full Senate Committee took the recommendation made by the sub-committee and asked the House Committee on Computers, Communication and Technology to look at the information, make a recommendation back to the Senate Ways and Means Committee, as well as to the House Appropriations Committee, about the computer system. As you recall, last session, much the same procedure was followed in regards to the computer system for the Department of Corrections. This time, however, the request was for the committee to look at the recommendation made by the Senate Committee, rather than the House Appropriations Committee.

Ralph Decker with the Kansas Lottery appeared before the committee and gave some brief comments regarding the computer idea for the Kansas Lottery (attachment 1). He also explained the agency has looked at this computer idea for the Lottery quite extensively, with a lot of talk and study going into the plan (attachment 2).

CONTINUATION SHEET

MINUTES OF THE House COMMITTEE ON Computers, Communication & Technology,
room 529-S, Statehouse, at 12 Noon ~~xxxx/xxxx~~ February 27, 1992

John Roberts with the Kansas Lottery appeared before the committee covering the Data Processing Acquisition Justification per DISC Guidelines (attachment 3). He impressed upon the committee one of the major issues is that the lottery depends very heavily upon data processing to generate revenue for the state. Should we have a major problem with our data processing, it means that part of the revenue derived from ticket sales (in excess of \$25 million per year) could be put seriously at risk. He pointed out they are a self-funded agency and their mission is to generate the maximum amount of revenue for the state based on their products. They are asking for a system which allows them to compute effectively within the lottery industry.

Discussion followed concerning problems of current hardware and software as outlined in the above attachment 1. Frank Calvillo, Systems Analyst offered clarification of specific problems they are experiencing with the LottOSTARTS package written by British American Bank Note (BARN) who are no longer involved in the software business.

Also, discussed were options, as covered in previous attachments. Chairman Dean asked if a needs analysis had been done and Jerry Oliver replied, one had not been done; however, an agency plan was put together by the data processing manager of the lottery. Chairman Dean suggested he may want to get with Jean Turner, DISC regarding preparation of a needs analysis.

Chairman Dean asked if they had a systems requirements definition. Mr. Oliver replied, due to the illness of the data processing manager, that information was not available at this time, however, any required information could be made available in the near future. Chairman Dean stated he did have several serious questions and at a later date they could come back to continue discussions. Chairman Dean conveyed the following questions he would like answered: is there a systems requirements definition? Have you done a needs analysis? Have you prepared a detailed specification? Are there deliverables? What are the options? How many vendors of both software and hardware are allowed to bid on this? Will the software run on different brand names of hardware? Do you have a schedule for implementation? How much time is required of state employees to fit the program to the hardware? He also suggested they might want to take a look at the post audit report on KFIS regarding the recommendations and procedures to follow. March 18, was suggested as a tentative date for follow-up meeting. Also, a tentative date of March 16, at 11:00 a.m., was set for a tour of the lottery.

Mr. Roberts was asked if he could provide a list of states which have a lottery, as well as what they may know about France.

The meeting adjourned at approximately 12:50 p.m., until Monday, March 2, 1992.

GUEST LIST

COMMITTEE: House OCT

DATE: 2-27-92

NAME (PLEASE PRINT)	ADDRESS	COMPANY/ORGANIZATION
DARRIAN S FORD	11683 GRANT DR. OVERLAND PARK, KS	DIGITAL EQUIPMENT CORPORATION
Jon McKenzie		: KCC
D. SMITH	TOPEKA	ST. INDEPENDENT TELEPHONE ASSOCIATION
Julie Klein	Topeka	Unisys
JERRY OLIVER	KS LOTTERY	
GARY SAVILLE	KS LOTTERY	
FRANK CALILLO	KS LOTTERY	
MATT BAUER	TOPEKA, KS	D. S. I.
WARRYN NEUDORFF	TOPEKA	D.O.A.-DISC
Dorothy L. Sutton	Topeka	Kansas Lottery
Harold E. Koch	Holywood, K	H&B Communications
Ralph Decker	Topeka	Kansas Lottery
BARB HINTON	Topeka	Post Audit
John Roberts	Topeka	Kansas Lottery



Joan Finney
Governor

Kansas Lottery

Ralph W. E. Decker
Executive Director

M E M O R A N D U M

To: Senator Wint Winter
Senator Frank Gaines

From: John Roberts, Director of Administration *JWR*

Date: February 21, 1992

Re: Request for Computer Hardware and Software

Enclosed is a summary of the Kansas Lottery's need for new computer hardware and software -- which will require Legislative approval. First section describes the deficiencies of the current equipment, and the remaining three sections outline options available and comparative costs.

To Synopsize:

* WHY IS NEW HARDWARE AND SOFTWARE NEEDED?

The Tandem hardware currently being used by the Kansas Lottery will cease to be supported by the manufacturer after July, 1993. This hardware was not state-of-the-art when it was installed in 1987. The Lottery acquired this hardware from British American Bank Note (BABN) in a package with software needed for start-up. This same hardware and software is being used by all departments to conduct daily Lottery business. Disruption in computer service would result in loss of revenue. Loss of continued service/support from the manufacturer could disrupt all Lottery operations.

The explosive growth of the lottery industry has caused unexpected demands on lottery computer systems. The software acquired by the Kansas Lottery in 1987 does not contain many features needed to conduct today's business. (See attached documents.)

* OPTION 1: Replace Current Hardware and Software

This option provides the same modern computer hardware and software being used by other lotteries. Hardware and software deficiencies would be eliminated and Lottery needs would be met for the foreseeable future.

This option has been recommended and met approval of the DISC analyst assigned to the Lottery. In addition, the option has been reviewed by the Division of the Budget and has been recommended by the Governor in the FY93 budget.

Estimate of hardware and software costs:
\$930,000 - \$1,070,999

(Exact cost would be determined by RFP)

* OPTION 2: Replace Existing Hardware and Re-write Existing Software

This option would provide modern hardware and improved software, after an indeterminate, but significant, length of time (initial estimate, three years minimum). Three additional staff members would be needed -- and the current deficiencies would not be resolved until completion. Project would require acquisition and integration of a general ledger package.

Estimated hardware costs: \$145,000
Estimated cost of added staff: 170,000
Estimated cost of general ledger: 60,000

* OPTION 3: Keep Existing Hardware and Software

This option is the least desirable. As stated above, lack of hardware manufacturer's service/support could result in the Lottery's computer hardware being unusable -- severely impacting the Lottery's ability to generate revenue.

Software deficiencies noted on the attached documents could not be resolved. As stated above, this would impede the Lottery's ability to effectively conduct business. The negative impact would certainly continue to compound in future years.

I welcome the opportunity to address the full Senate Ways and Means Committee on this subject.



Joan Finney
Governor

Kansas Lottery

Ralph W. E. Decker
Executive Director

TO: John Roberts, Director of Personnel
FROM: Frank Calvillo, DP Systems Analyst
DATE: February 25, 1992
SUBJECT: Age of Tandem equipment

A Tandem representative notified me that the EXT/25 processors are approximately 12 years old and the TXP processors are 9 years old. In view of the rate which technology develops, these figures put the equipment in the obsolete state.

KANSAS LOTTERY INFORMATION PLAN

I LOTTERY MISSION

The Kansas Lottery was authorized by statute to implement and run a lottery, with a percentage of revenues generated by lotteries to be placed into the State Gaming Fund. Monies in this fund are disbursed according to the dictates of the legislature.

II AGENCY GOALS AND OBJECTIVES

The primary goal of the Kansas Lottery as related to the information management function is to develop a fully integrated software and hardware configuration that will be flexible enough to accommodate any anticipated growth. The Kansas Lottery Data Processing requires staffing and computers to accomplish all necessary sales, marketing, accounting, and other functions, at least on a minimally acceptable level. Due to various security considerations, staffing, computers, and other items related to Lottery business are independent of other state agencies with the exception of personnel matters, payroll, and other payments (vendors and winners).

III CURRENT INFORMATION MANAGEMENT SITUATION

The Lottery purchased a software package designed by British American Bank Note (BABN), and Tandem hardware as the platform for the software. The package, although sufficient to get the Lottery through startup mode and through the first several years of operation is lacking in several key areas.

LottoSTARTS, as the package is named, is not sufficiently integrated to allow the most efficient usage of computer resources. Although a large amount of raw data is captured, for example, some accounting functions are accomplished on PCs utilizing printed reports from LottoSTARTS as input. Various marketing functions, such as demographic research, are not handled in LottoSTARTS either.

This lack of integration has been a major criticism from external audits. Several Legislative Post Audit Reviews, audits by Arthur Anderson (the State Authorized Auditor), Arthur Young (the Lottery's external auditor), and most recently Meyers & Stauffer, reference the lack of integration as a negative.

The primary drawback to LottoSTARTS, however, is the fact that the Kansas Lottery is the only organization utilizing this software and the vendor (BABN) is no longer marketing the package. This means that all support for the system is the Lottery Data Processing department, which functions with minimal staffing. The Lottery faces the risk of having problems develop within LottoSTARTS that we are unable to fix within a realistic time frame because of our minimal staffing levels and the unavailability of outside support. Since revenues are dependent upon the sales support functions of LottoSTARTS, problems with the software can have a major impact upon the ability of the Lottery to provide income to the state.

Experience in the business of running a lottery operation has pointed out several other shortcomings in the present system. The number of games that can be sold at any given time had been fixed at three, for example, restricting Lottery ability to efficiently handle varying market conditions. A fix that allows more than three games was designed and installed in 1991, but it is a "patch" job that cannot easily be integrated into the system and which requires additional manual operations to accomplish the objective. A good fix to the lack of versatility would take considerable manpower to both fix the lack and to integrate the fix into the software, with the latter being the most time consuming portion.

With the Lottery meeting basic information management requirements, but not having adequate resources to fully and efficiently utilize the potential of the information management system, current status could be classified as "limping along."

One additional area of concern at the present time relates to Personal Computers and Personal Computer Software. As we mature as an organization we find that various functions now being handled on Personal Computers are expanding in scope. The main areas of this expansion are in Accounting functions and in Marketing. Additionally, we find that a need for standardization of software used for these functions has developed.

IV INFORMATION MANAGEMENT DIRECTION

As stated in section II, the primary goal of the Lottery as related to the Information Management Function is to enhance systems and procedures to enable full integration of all aspects of the operation. This will put us into compliance with the audits mentioned earlier, as well as giving us a fully functional system.

After a thorough evaluation of the proposed five-year plan discussed in last year's Information Management Plan, it was decided to forgo an internal re-design of the LottoSTARTS system. Instead, the most cost-effective and logical approach was determined to be purchase of a vendor written software package combined with a new hardware platform on which it would run.

A package put together by Anderson Consulting was evaluated and determined to be the best available to meet the needs of the Lottery. This package, ACCLAIMS, runs on an IBM AS/400 platform. It is in use by a number of lotteries, and the track record is excellent. A User's Group plus the commitment of Anderson Consulting to ongoing support would provide the Lottery with the support and ongoing enhancements needed to remain current with available software.

A request was submitted for authority to purchase the ACCLAIMS software package and associated hardware in the 1992 budget year (Attachment "C"). However, due to a freeze on purchase of new equipment and software, we will be unable to upgrade at least until the 1993 budget year. Until such software and hardware is purchased the Lottery will attempt to function as best as possible under the existing software/hardware environment. The anticipated cost of this package, including hardware, software, and necessary training, is in the neighborhood of \$1.1 Million. Section VI, Attachment "A" and Attachment "C" go into details of background, feasibility, and cost/benefit analysis

As technology improves and new methods of using that technology for Lottery operations are devised, studies of such new technologies (including cost/benefit analysis) will be performed. If appropriate, such new technologies will be purchased. One example of such a study is one currently being done of the feasibility of a system that would allow for on-line validation of winning instant tickets. Another study recently undertaken showed that, although there are advantages to satellite hookups for on-line terminals, the disadvantages outweigh the potential benefits.

Another area to be considered for equipment and software purchase is Video Lottery. Although enabling legislation failed to pass this year, there is a good chance it will be passed in the next legislative session. Implementation of Video Lottery will require computer hardware, computer software, and telecommunications facilities. Until such legislation is passed and parameters are established, specific requirements are impossible to determine. One of several viable options for implementation of Video Lottery would be for a vendor to provide the equipment, software, and expertise on a percentage of revenue basis. This method,

though not the most favorable from the standpoint of continuing revenue to the state, would not require any capitol expenditures.

Where appropriate, consultants will be used for studies and/or implementation of projects. However, careful evaluations will be done to ensure that consultants are not used for those functions that would be better handled by in-house staff.

In the Personal Computer area, the need has developed for better standardization of software, the ability to share files between users (a Local Area Network of sorts), and to provide access to production data resident on the Lottery computers. Section VI of this document includes a method by which the Lottery will be able to accomplish this standardization of software, shared files, and read-only access to production files, while allowing for elimination of as many as 14 Personal Computers. Cost of the necessary software is included in the price of the software listed in Section VI.

V EXAMPLES OF IMPLEMENTED PROJECTS

An Internal Control System (ICS) to provide necessary checks and balances against the winner selection and sales reporting of our on-line vendor was installed as per contract with our on-line vendor. The system, as installed, was not in an easily maintainable format. The Lottery Data Processing staff re-designed the ICS system to improve running speed, maintainability, and report generation. A two month parallel acceptance test was begun on June 1, 1991. By implementing this re-designed system the Lottery was able to avoid the cost of an outside maintenance contract, as well as general system streamlining, documentation, and report enhancements.

VI FEASIBILITY STUDIES FOR PROPOSED PROJECTS

PROJECT: Replace LottoSTARTS WITH ACCLAIMS software (included in this will be replacement of TANDEM hardware with IBM hardware, and elimination of the IBM S/36, with its Office Automation functions migrating to the new hardware)

PURPOSE: To meet mandates of various audits by ensuring an integrated system, which includes a General Ledger package; to enhance sales and marketing support functions; to upgrade the Lottery Office Automation system; to eliminate the risks involved in being the only user of a software package that is no longer marketed; to obtain the benefits of experience other lotteries have with a software/hardware package; to reduce dependence upon PCs for functions that would be more effec-

tively performed on an integrated computer system. (See Attachment "C" for a summary of the research that went into package selection).

COST: Initial outlay for hardware, software, and consulting services (less trade-in of existing equipment) is projected to be \$930,000. Ongoing maintenance cost after the five year warranty period expires is projected to ~~be~~ begin in year 6 at \$19,812, and increase at the rate of seven and one-half percent per year thereafter. No personnel, space and environment, training, data conversion, or DISC costs (other than what is covered under the category of "consulting services") will be incurred. (See Attachment "A" for details)

COST OFFSETS: Savings in cost of maintenance would total \$775,033 for the first five years, \$171,844 for year six, and \$184,732 for year seven. The initial outlay would be recouped from this savings in maintenance cost alone in approximately six years. However, conservative estimates are that net sales will increase by one percent. Applying that one percent figure to Instant and Pull Tab sales for FY1991 shows a net sales increase of \$300,000 per year. Approximately 12.5% of sales is applied towards administrative costs, so another \$37,500 per year would accrue as a direct result of the upgrade. Applying that to the payback brings it to approximately four years and eleven months for a payback period. (See Attachment "A" for details).

The estimated \$100,000 cost of a General Ledger package (mandated by the Legislative Post-Audit Committee and funded but not spent in the FY1991 budget year) would, if applied instead to purchase of this system which includes an integrated General Ledger package, shorten the payback period by another six months, to a total of four years and five months.

UNQUANTIFIABLE COST OFFSETS: The ability to more efficiently manage inventories and orders will likely reduce the number of returns, thereby increasing net revenues. The lower exposure to age related system problems potentially impacting the ability to sell and deliver tickets can, if it keeps us from having just one problem, save significant dollars in lost sales.

INTANGIBLE BENEFITS: The lessened exposure to age-related hardware problems will minimize Lottery exposure to down-time situations that could have a very negative effect on sales (in addition to reducing exposure to contractual difficulties with

MUSL were the Lottery to miss commitments related to Lotto*America). The increased flexibility of report generation capabilities will provide better reports for user departments. The "user-friendliness" of the Office Automation system will provide an incentive to make better use of E-Mail and other capabilities that are unused in the current system. Data Processing time now devoted to resolving problems, working around the lack of integration, etc., will be more effectively utilized to provide enhancements to the system, as well as providing better turn-around for ad-hoc requests. Standardization of software used for traditional PC applications, the ability for read-only access to production files (for those authorized), and the ability to share files between groups of users will enhance the overall operation.

PROPOSED CONFIGURATION: To properly size an AS/400 requires factoring in ACCLAIMS basic software requirements, Office Automation requirements, capacity for development, and requirements for ICS. The preferred configuration is an AS/400-D35 handling the ACCLAIMS with sufficient excess capacity to handle ICS, plus an AS/400-D20, which would handle normal ICS processing, Office Automation, and development requirements. The two major benefits of a two-system configuration are: (1) normal development and ICS would not impact the production ACCLAIMS environment; and (2) the Lottery would meet the MUSL requirement calling for ICS to run on a Fault Tolerant computer or to have a fully redundant backup computer system.

VII CURRENT CONFIGURATION: The present configuration, as shown by Attachment "B" consists of the following:

- a) A TANDEM EXT-25 computer running the Back Office system (LottoSTARTS), and hooked up to printer and terminal equipment at each of the four regional offices
- b) An IBM System 36, used for Office Automation and controlling 35 terminals (word processing, E-Mail, and Calendar).
- c) Twenty-three Personal Computers (PCs) utilized for various functions. Two are assigned to Security. One is assigned to Personnel (also tied into the State personnel system). One PC is assigned to Communications, and one to Sales/Marketing. Accounting has eight (some of which tie into STARS). The Internal Auditor has one, Data Processing has five, Telecommunications has one, and three are at regional offices.

A T T A C H M E N T "A"

COST OF SOFTWARE:	\$ 380,000
(includes ACCLAIMS, ICS, Office Automation, spreadsheet, data base, and all IBM software)	
COST OF SOFTWARE INSTALLATION:	\$ 400,000
(includes setup, conversion of old data, operational training, documentation training, programmer familiarization, post installation support)	
COST OF HARDWARE CONFIGURATION:	\$ 250,000
(includes two AS/400s, a Model D35 for main processing a Model D20 for Office Automation and development, and a 5 year extended warranty)	
ANTICIPATED TRADE-IN VALUE:	(\$ 100,000)
(includes IBM S/36 and TANDEM EXT-25)	
TOTAL COST EXCLUDING MAINTENANCE:	<u>\$ 930,000</u>

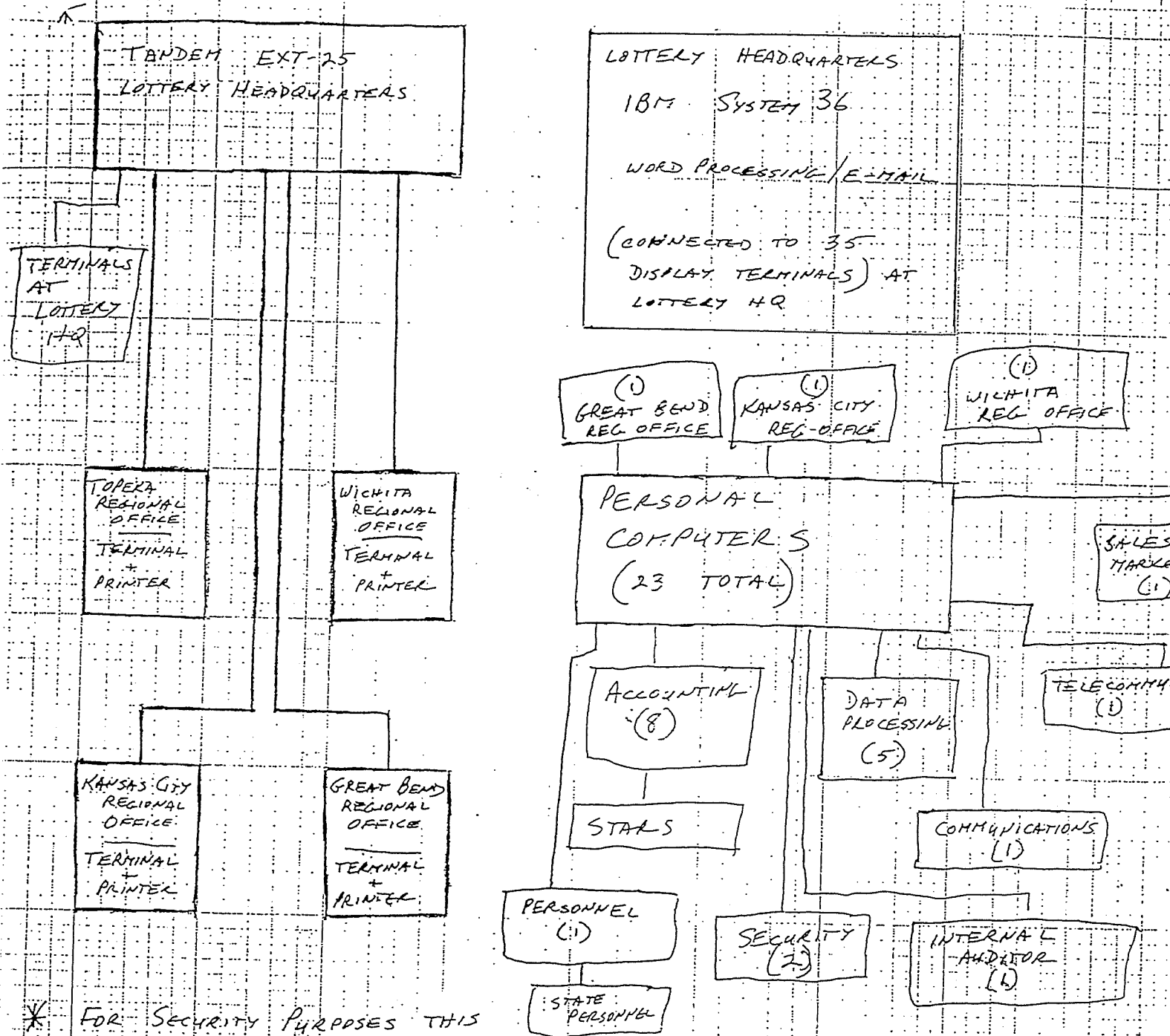
PAYBACK CALCULATIONS:

YEAR	MAINT COST NEW SYSTEM	MAINT COST OLD SYSTEM	ANNUAL SAVINGS	SAVINGS TO DATE
1	-0-	\$133,500	\$171,000	\$ 171,000
2	-0-	\$143,125	\$180,625	\$ 351,625
3	-0-	\$154,276	\$191,776	\$ 543,401
4	-0-	\$165,847	\$203,347	\$ 746,748
5	-0-	\$178,285	\$215,785	\$ 962,533

Notes:

- 1- The figure of \$ 930,000 will have been achieved in the eleventh month of year 4.
- 2- Maintenance cost for all systems is increased at a conservative 7.5% annually for inflation.
- 3- Annual Savings is calculated by adding maintenance cost savings to \$37,500 per year (12.5% of the projected one percent increase in sales)
- 4- Additional savings would accrue from:
 - a) elimination of surplus Personal Computers; and
 - b) reduced requirements for Personal Computer software packages.

CURRENT CONFIGURATION



* FOR SECURITY PURPOSES THIS SYSTEM IS NOT TIED IN ANYWHERE BUT TO TERMINALS AT HEADQUARTERS AND TO THE REGIONAL OFFICES. ALL CONNECTIONS ARE VIA DEDICATED TELEPHONE LINES.

M E M O R A N D U M

To: Walter Darling, Budget Analyst
Division of the Budget

From: Jimmy D. Grenz, Deputy Director
Kansas Lottery

Date: March 1, 1991

Subject: Lottery Computer Environment

As follow-up to our previous discussion concerning the Kansas Lottery computer environment, I am providing you with information on its history, present status and future agency needs.

In 1987, the Lottery was in its infancy and needed computer hardware and software which could track instant tickets from the time they were ordered from the manufacturer through sale by the individual retailers, payment of prizes, and finally through destruction of unsold inventory.

Requests for proposals were issued and British American Bank Note Corporation (BABN) of Canada was ultimately chosen as the successful bidder for both the instant ticket contract and as the instant ticket computer software provider. BABN developed its instant ticket software, known as LottoSTARTS, on a Tandem computer. BABN chose Tandem computer architecture for two basic reasons. First, it was a computer environment with which BABN programming personnel were familiar. Secondly, Tandem offered a fault tolerant system which at the time was believed to be necessary for Lottery operations. Since initial start-up, fault tolerance has proven to be unnecessary. It is important to note at this point that the development of LottoSTARTS was the first and only attempt by BABN to develop instant ticket software. BABN no longer markets this instant ticket software product nor does BABN or any other company support LottoSTARTS software.

Following a rapid development and installation schedule, instant tickets went on sale on November 12, 1987. Almost immediately the Lottery began to discover many shortcomings in the software, and following a series of discussions and negotiations with BABN LottoSTARTS software was modified.

These modifications, known as Generation II, still failed to meet agency needs, and perhaps more importantly, they fell far short of addressing emerging legislative concerns. Among the major concerns being voiced by legislative committees was that the agency computer systems were not integrated and that financial data had to be reconciled manually. These factors contributed to errors in reports, and reports were not being issued in a timely manner. It was noted that more accurate financial information would be available on a more timely basis if the various sources of information could be integrated on the Tandem computer system. During its review of agency operations, the Legislative Post Audit Committee recommended that the Lottery explore the possibility of software enhancements and modifications to allow the installation of a fully integrated general ledger package on the Tandem computer.

Myers and Stauffer, the agency's outside auditing firm, received the contract to perform this study and to make recommendations concerning solutions. Their study was limited to trying to develop and recommend inexpensive solutions to satisfy the Legislative Post Audit Committee's concerns with financial data management and full integration of a general ledger on the Tandem. Myers and Stauffer was not attempting to resolve the myriad of other problems associated with the BABN instant games software. Myers and Stauffer was able to identify two businesses which offer general ledger software for Tandem architecture. Both of these businesses are Tandem business partners. Either of these general ledger packages can be integrated with the LottoSTARTS instant games software but integration will require a good deal of effort by agency programmers or contract programming personnel. The cost for this solution, if interfacing is accomplished in house, is estimated to be about \$100,000 to \$150,000. The agency has tested both general ledger packages, and each appears to be acceptable from the financial management standpoint. However, installation of either of these software packages will address only a small portion of the numerous existing inadequacies.

In evaluating the overall needs of the agency, consideration of the following is in order: Kansas is presently the only state using LottoSTARTS software. This software has many, many shortcomings. It was developed on a Tandem computer which is expensive as well as difficult to maintain. The LottoSTARTS software is very poorly documented, this factor makes programming changes extremely difficult. This creates an environment in which unexpected and unanticipated results are commonplace when even minor programming changes are made. The amount of time expended in resolving small changes can be and often is exorbitant.

These factors led management and data processing personnel to look for alternate solutions. Among the alternatives explored were:

Rewriting the entire instant games software package, customizing it to the needs of the Kansas Lottery. This proposal is estimated to take as long as five years to complete and would require as many as six additional full-time employees.

A second option explored was the purchase of the Washington State Lottery software currently being developed for a Tandem computer. While this software appears to be excellently documented, the Washington Lottery is only in Phase One of a three-phase project which is not scheduled for completion until January, 1992, at the earliest. Additionally, the Washington software package does not and will not have a general ledger included, a deficiency which would have to be addressed by the Kansas Lottery in order to satisfy legislative concerns. While the price is most reasonable, estimated at about \$15,000, there is no guarantee of when the package will be completed, and Washington Lottery officials have stated that they are not in a position to support this software after the proposed sale.

A third alternative looked into involves the purchase of the Washington software and then taking the best of it and integrating the best of LottoSTARTS and a general ledger, into one custom software package. This again would call for additional staffing and unspecified time requirements.

A fourth, and the final, solution explored by Lottery management has been to replace the present LottoSTARTS software with a software package which addresses the current needs of the agency as well as providing a solid base and flexibility to meet the future requirements of the Kansas Lottery.

The above considerations led management to look at the ACCLAIMS software package developed and marketed by Andersen Consulting. ACCLAIMS software has been chosen by the five newest lottery states, and it appears that ACCLAIMS has more to offer than the other solutions examined. Andersen Consulting developed the ACCLAIMS software package over a period of several years, and through this process has dealt with the majority of the lottery states in the United States, as well as a number of lotteries outside the U. S. Their software was developed from an accountant's point of view and seems to satisfy the concerns voiced by various legislative committees. Andersen has developed a user's group among the

various lottery states they serve. Enhancements and developments are shared among the members for the benefit of all. While the Lottery doesn't wish to sound like a commercial advertisement for ACCLAIMS, Andersen Consulting has developed a program which meets the agency's current needs and provides flexibility for years to come. Andersen Consulting chose IBM architecture on which to develop its software. ACCLAIMS is written in RPG (report generating language) for installation on the IBM AS400 series computers.

The total cost of implementation of the Andersen Consulting solution is approximately \$1.5 to \$2 million, which includes both software and hardware. Although this solution is the most expensive, it is the only solution which answers both immediate and future needs. From the date of order, this system could be installed and made operational in a period of 4 to 6 months, which is most inviting when compared to the other solutions.

The Lottery is seeking direction and assistance in determining the proper course of action. Should the Lottery maintain status quo, install a general ledger software package only, rewrite present software, purchase Washington State software and modify it to meet agency needs, or should the agency seek to replace the present software and through necessity replace present hardware?

Following is a partial listing of the major features, benefits and shortcomings of the various solutions which include estimated costs where known and approximate installation times.

#1 - LottoSTARTS/Tandem Computer

LottoSTARTS is very poorly documented, which gives rise to many problems associated with maintenance and modification. Programmers are forced to use trial and error methodology. Examples include the fact that the Lottery is limited to having only three instant games on the system at any given time. This limitation results in lost revenue, as an active game must be terminated in order to introduce a new game. This revenue loss is a result of decreased sales of the terminated game, and the actual cost of the tickets which are shredded because of ticket returns when a game is prematurely ended. LottoSTARTS does not contain a general ledger, and this software is not fully integrated with other games. LottoSTARTS does not capture, in usable form, many of the marketing types of information which are available in the ACCLAIMS software package. This information would be most valuable in accessing marketing trends and developing marketing strategies to enhance lottery sales. Regional sales information is difficult, if not impossible, to retrieve. Ad hoc reports require new, often cumbersome, programs to be written. LottoSTARTS software is written in the

Tandem version of Cobol which requires a higher degree of knowledge on the part of programmers than many other languages, thus making the hiring and retention of employees more difficult.

LottoSTARTS software does not exist anywhere else in the world, and it is not supported in any manner by the developer. This means that the Kansas Lottery is unable to take advantage of system innovations and improvements which are being developed in other lottery jurisdictions. The Kansas Lottery must repeatedly re-invent the wheel, a major drawback in a rapidly moving and changing industry.

The Tandem computer system is an excellent fault tolerant system. Although fault tolerant systems do offer some advantages when it comes to reliability, they are expensive to own, operate and maintain. At present the Lottery pays about \$125,000 yearly for maintenance of the Tandem system. This can be compared to the cost of \$25,000 annually for an IBM AS400 series system. Fault tolerance is no longer a requirement for Lottery back office (instant games) software. With the exception of Washington State, no other Lottery uses a Tandem computer system. No other development group has developed or seems interested in developing lottery software on a Tandem computer. More than one third of the state lotteries, which includes the five most recent lottery states, have chosen to install Andersen Consulting (ACCLAIMS) software which operates on IBM AS400 series computers. While remaining status quo would not require capital outlay or time to implement, it certainly does not address the wide variety of agency and legislative requirements and concerns. It also severely limits the growth potential of the Kansas Lottery instant games.

#2 Installation of a General Ledger Package

The legislature did grant sufficient funding in the FY1990 budget of the Lottery to install a general ledger software program on the Tandem computer system. Estimated costs involved are approximately \$100,000 to \$150,000. Present estimates for acquisition and installation are July, 1991. This would be followed by integration of the general ledger program into the LottoSTARTS software, which will take several months to accomplish by staff. Time could be reduced to several weeks if integration is accomplished using the general ledger software contractor who would be devoting full time to the project. Substantial additional costs would accrue to the agency under this scenario. This option would address the major concerns voiced by the Legislative Post Audit Committee, but it does not address any of the other existing problems and does nothing to position the agency to resolve future needs such as bar-coding. It is at best a "Band-Aid." It is not a solution.

#3 Customizing Present Software with or without Washington State Software.

This option at first might appear as an acceptable, even desirable, solution. It would make use of existing hardware and software, and if the Washington State Lottery software package were purchased the cost would be nominal, about \$15,000. However, many pitfalls become apparent when it is viewed more closely.

First it would still require the purchase of a general ledger software package at \$100,000 to \$150,000 and interfacing this package with LottoSTARTS. If the Washington State software is used it would have to be taken apart and integrated into the LottoSTARTS and general ledger software to create a unique Kansas Lottery software product. This process would be manpower intensive, requiring additional staffing, and would be time consuming. Estimates of time needed to complete this process extend up to five years. Kansas would not benefit from the experience of other developers, and would have to start from square one any time enhancements were made. On top of all this is the most important factor of all: In the end the Lottery would be unable to guarantee that the system would work as envisioned because there is no track record. The Kansas Lottery data processing staff has never taken on a project of this magnitude. The Lottery is informed that custom programs and major rewrites of software at this level have not received favorable review by the State, based on the past performance by agencies which have undertaken such tasks. Historically major rewrites have taken much more time to complete than estimated. They have been much more expensive than expected, and additional staff hired for the implementation phase often stay beyond project completion becoming additional permanent full time employees.

ACCLAIMS - IBM

This solution appears to offer the best solution to the overall needs of the agency, not only for the present but for the future as well. It is the most expensive solution when viewed only from a short term perspective, but over the long term it would pay for itself. This is because of features built into the software and the substantially lower maintenance costs associated with hardware. One important software feature of ACCLAIMS is the allowance for up to 99 instant games. The addition of this feature would mean that instant games would not have to be prematurely ended, possibly allowing games to be completely sold out. The system allows pack size to differ from game-to-game which could be beneficial to overall sales by allowing retailers to order packs that suit their individual inventory requirements.

The software is module-based and is designed for expansion, to include features such as protected check writing, bar coding, and on-line validation. From the base program special features can be added when needed which maximizes cost effectiveness. Developments by members of the user's group are shared among all members; therefore, each benefits from the knowledge and developments of the others. Andersen Consulting and their ACCLAIMS software have a rock solid track record dating from the installation of their original lottery back office system in Arizona in 1986, to their most extensive ACCLAIMS installation in the state of Minnesota in 1990. Minnesota is a non-gleps state that supports cross redeems of all low and mid-tier tickets and on-line bar code validation of all winners. The ACCLAIMS software package used in Minnesota has been developed to the point that it writes and signs all winners' checks, and it is set up to handle annuitized payments. Although all of these features are not presently needed by the Kansas Lottery they demonstrate the flexibility of the software. ACCLAIMS captures usable information and produces reports that enable sales and marketing personnel to make informed decisions concerning trends. Present software fails badly in this area.

The agency would benefit from the experience of Andersen Consulting in the private and public business arenas, as well as their vast experience within the Lottery industry. The cost of the Andersen Consulting ACCLAIMS software and IBM computer system necessary to operate the software is estimated at \$1.5 to \$2 million.

At this point I am sure that it comes as no surprise to you what the agency wants. The Kansas Lottery would like to purchase ACCLAIMS software and necessary hardware. An order placed during March, 1991, would allow sufficient time for installation and testing to make the system operational on July 1, 1991, the beginning of the new fiscal year. According to Andersen Consulting, initiating operations on the ACCLAIMS software at or near the beginning of a fiscal year would minimize the amount of computerized history necessary for migration to the new system. This translates into cost savings for the agency.

This brings us to the matter of funding as the Lottery does not have sufficient budgetary authority in the FY1991 or FY1992 budget request to fund such a purchase. Perhaps the following is worth consideration:

Preliminary discussions with Andersen Consulting have been forthright and they are aware of our present financial position and the fact that the agency is facing sunset review in the 1992 legislative session. Andersen Consulting is aware that the agency is presently considering two general ledger software packages for installation on the Tandem computer. Viewing this as only a short-term, temporary fix of only one

issue, Andersen Consulting has proposed that the Kansas Lottery not purchase a general ledger. Andersen Consulting is in the position of financing the cost of ACCLAIMS software and IBM hardware until the fiscal 1993 budget year under the following conditions:

1. Revenue presently allocated for the purchase of a general ledger package at a cost of approximately \$100,000 to \$150,000 in the FY1991 budget be expended toward this purchase;
2. Budget allocations for Tandem annual maintenance, approximately \$125,000 in FY1992, be expended toward this purchase; and
3. That proceeds of the sale or trade of the Tandem computer system through the surplus property division of the State go toward this purchase. Trade or sale value of this system is estimated to be about \$100,000.

Under this arrangement final payment of the balance plus interest would be due during the FY1993 budget year. Following this proposal the agency would not have to amend its present budget request for FY1991 or FY1992. Andersen Consulting and IBM are willing to assume the risk that the Kansas Lottery will be extended beyond the next sunset review and that final budget approval for the purchase would be granted in FY1993 if other arrangements cannot be made prior to that. This is an inviting proposal, but it does come with the added costs associated with financing the unpaid balance which would be accruing until the agency could make final payment.

The agency anticipates that it will generate sufficient retained earnings during this time period with which to fully fund the purchase -- if revenues beyond the Governor's present estimates are allowed to be retained for this purpose.

Over the past several months the agency has gathered a vast amount of information concerning the various options discussed here. Should you desire to review any of these materials please advise. As stated previously the Lottery is seeking guidance and assistance from the Division of the Budget. Your consideration of this important matter is appreciated.

You should also be made aware that the Lottery is considering introduction of legislation in either this or the next legislative session which would allow the operation of video lottery terminals across the state. The passage of this legislation would possibly create the need for additional software and hardware in addition to that discussed here.

Issue Resolution

Based upon the results of the legislative audit, the external auditor's report and discussions we have had with Lottery management, we present here our understanding of the key issues facing the Kansas Lottery. In addition, we present the features of the ACCLAIMS software which can assist the Lottery in addressing the issues and the benefits available to the Lottery with the ACCLAIMS software.

For purposes of discussion, we have broken down on the following pages, the presentation into the following sections:

- Results of the external and legislative audits
- Limitations of the current instant game system
- Multiple environment considerations
- Future needs considerations

CCT
Attachment 2
2-27-92

External and Legislative Audits

The results of the 1989 external audit and the legislative performance audit report of February 1990 focused on the need to increase sales, reduce costs, integrate the financial systems and provide financial reports in a timely manner. The legislative report gave five specific recommendations. We have reviewed and summarized the following issues as listed below.

Key Issues

1. A self-sufficient foundation.
2. Reduction of administrative costs:
 - Salaries and wages
 - Professional services
 - Telecommunications costs
 - Travel.

ACCLAIMS Features

- ACCLAIMS is a fully integrated Instant Game System. Some of the key functions provided include:
 - Telemarketing
 - Inventory Control
 - Billing, Accounts Receivables and EFT
 - Claims Validation and Payment
 - Financial Management
 - Directors Information System
 - Sales and Regional Analysis Reporting
 - End of Game Reconciliation
 - Annuity Prize Payment.

ACCLAIMS Benefits

Lower Administrative costs:

- Better inventory and marketing controls reduce stock-outs and returns.
- Automated initial allocations based upon historical information.
- Multiple game support significantly reduces need for shredding returned tickets.
- States using ACCLAIMS have an average administrative cost of 15% of sales.
- Lower annual system operating costs.

Cost Advantage

- Competitive with other options relative to current operational costs.
- Several options to meet Lottery's specific needs.

External and Legislative Audits Cont.

Key Issues

3. Document dollar transfers to ensure compliance with Kansas statutes and legislated mandates.
4. Ensure development of financial reports on timely basis.
5. Implement integrated financial reporting.

ACCLAIMS Features

- ACCLAIMS has fully automated financial transaction processing:
 - Each operational transaction that affects the financials, automatically creates a general ledger transaction.
 - Complete audit trail for all financial transactions.
 - Transactions are table-based driven, allowing flexibility in defining chart of accounts.
- ACCLAIMS has complete integration to the general ledger:
 - All instant game transactions are automatically posted to general ledger.
 - Complete audit and balancing reports.
- ACCLAIMS provides both standard and ad hoc financial reports:
 - Numerous standard reports
 - General ledger has an ad hoc report writer
 - General query tool for additional ad hoc reports.

ACCLAIMS Benefits

- ACCLAIMS will ensure the Kansas Lottery complies with many of the audit report recommendations, including:
 - Full financial integration.
 - Complete and timely financial reports.
 - Reduced costs through better inventory management, lower levels of returns, and lower ongoing system costs.
 - Ability to increase sales through better tel-marketing support, improve sales analysis reports and multiple game support.

Limitations of the Current Instant Game System

Key Issues

1. The current Instant Game system, running on the Tandem hardware, has an inflexible design which does not adequately support the current needs of the Kansas Lottery.

Key deficiencies include:

- Weak financial processing support:
 - Many of the Instant Game transactions are either manually created or processed.
 - Other transactions are manually processed, such as the purchasing transactions.
 - There is no consolidation of financial information for the Instant Game and the On-line Game, such as consolidated sales and billing.
- The system supports only 3 concurrent games. This affects both sales and costs. Sales are affected because no additional games can be started while three other games are active and typically, sales fall off during the later stages of a game. Costs are affected in that if a fourth game is started, the oldest game is ended at that point. This results in significant returns processing, ticket shredding and lost sales.

ACCLAIMS Features

- ACCLAIMS provides complete financial integration for all instant game functions. All financial transactions are automatically created. ACCLAIMS is completely integrated with a general ledger. All transactions are automatically posted to the general ledger, based upon user-defined levels of detail.
- Optional consolidated billing and sales information for Instant and On-line games.
- Multiple game support:
 - Up to 99 games
 - Each game has individual parameters to support changes in game structure.

ACCLAIMS Benefits

- Meets the need for integrated financial systems and reports:
 - All financial transactions created automatically
 - Completely integrated general ledger.
- Flexibility to support multiple concurrent games.
- Reduction of tickets returned, tickets shredded and sales lost due to system inflexibility.

Limitations of the Current Instant Game System Cont.

Key Issues

- There is no exempt player validation check done by the system. This check must be done manually, which could result in ineligible players (such as lottery employees or vendors) claiming prizes.
- There is weak support for sales reporting and analysis, which does not allow the Lottery to focus on those components that increase sales.
- 2. There is redundant data on the Instant Game and On-line Game systems: retailer information, sales information, billing information, and other financial information. This results in manual consolidation of the data and raises the possibility of inconsistent data.

ACCLAIMS Features

- Full system security:
 - 10 status codes
 - Validation checking at the ticket level
 - Exempt player checks
 - Retailer licensing data.
- Complete Sales Analysis reporting system:
 - Sales reporting by:
 - Chain
 - Retailer type
 - County
 - Game type.
- Optional consolidated billing and sales reporting:
 - Automates billing functions so that retailers get one summary, one EFT sweep.
 - Consolidates all retailer activity and sales.

ACCLAIMS Benefits

- Greater assurances of the integrity of the data of the Lottery.
- Better management and marketing information allows Lottery to increase sales through:
 - Identifying and acting on player demographics and improved sales analysis reports.
 - Increased player satisfaction
 - Complete game integrity
 - Cross-redeems availability (optional)
 - Real-time payment of claims (optional).
- Better management information allows Lottery to increase sales through retailer satisfaction:
 - Complete game integrity
 - Timely order processing, reduction of returns, accurate billing statements
 - Automated retailer accounting (optional)
 - Consolidated billing and EFT sweeps (optional).

Limitations of the Current Instant Game System Cont.

Key Issues	ACCLAIMS Features	ACCLAIMS Benefits
<p>3. There is a slow turn-around for mid/high tier prize payments. Although this is a policy issue, the current system cannot support payments at the Lottery locations if the policy is changed.</p> <p>4. There are high ongoing costs associated with both the application software and the hardware. Some of the cost considerations include:</p> <ul style="list-style-type: none">• Maintenance of application software is expensive and time consuming due to:<ul style="list-style-type: none">- Inflexible system design- Complex programming language- Complex operating system characteristics- Poorly documented application software.	<ul style="list-style-type: none">• Optional consolidation of claims payment for On-line game.• Fully integrated claim validation and payment capabilities. • Parameter-based system with on-line help:<ul style="list-style-type: none">- Most functions and options are parameter based, such as Tel-marketing call sequence, number of warehouses, safety stock levels, billing, parameters, etc.- On-line text help available for all screens and can be tailored to meet Lottery requirements.	<ul style="list-style-type: none">• Flexibility to modify the operations of the Lottery as the need arises. • Fully documented system and system design allows Lottery to modify/expand system as needed.

Limitations of the Current Instant Game System Cont.

Key Issues

- Data processing staff costs due to several factors. Difficulty in finding people with the required skills. These same skills can demand a higher than average salary. Also, once Lottery employees have gained these skills and expertise they become a hot commodity for the private sector.

- Tandem has an excellent fault-tolerant architecture, but this architecture is exclusive and very expensive. Plus the lottery industry has shown that fault tolerance is not required for back office systems.

ACCLAIMS Features

Full Vendor Support

- Andersen Consulting is an Industry-leading vendor:
 - First to implement fully operational on-line validation of all tickets, e.g., Minnesota Lottery.
 - Has the only Back Office user group.
 - Only vendor with installed base that is independent of any ticket or on-line game vendors.
- Leading worldwide systems integrator
 - 20,000 professionals
 - Financially strong
 - Long-term commitment to industry.
- Dedicated development center for product enhancements.

- AS/400 usage is widespread and a strategic product for IBM:
 - Easy to use
 - Easy to operate
 - Easy to modify, add new functions.

ACCLAIMS Benefits

- MIS personnel easier to obtain/retain.
- Reduced risk by using the leading Lottery Back Office system vendor and the largest worldwide consulting firm.

- Very favorable cost advantage when compared to current operational costs.

Limitations of the Current Instant Game System Cont.

Key Issues

- There are very few, if any, other states that use this back office system. As a result, there is limited capability to use what other states have developed. This requires the Kansas Lottery to develop all enhancements from scratch and to go through the entire learning process every time.

ACCLAIMS Features

- Andersen Consulting's integrated ACCLAIMS software is the most functionally complete and proven system in the industry. It has been implemented in the last five start-up states: Minnesota, Indiana, Idaho, Kentucky, and Virginia. No other back office system provides complete integration between the instant game ticket accounting, validation and inventory control functions.

ACCLAIMS Benefits

- Fully operational base system is ready to install.
- Systems development center and user ACCLAIMS group provide for ongoing development and sharing of ideas.

Multiple Environment Considerations

Key Issues

1. There are five basic environments for managing the Lottery operations. These include:
 - Concurrent system for the On-line Game
 - Tandem system for the Instant Game
 - System/36 for some financial systems and some office automation (primarily word processing)
 - PCs for financial processing, reporting and word processing
 - Manual systems for financial processing and reporting
2. This multiple system environment has several deficiencies that impact the Kansas Lottery.
 - a. There is a lack of integration across the systems, especially for financial processing, reporting and analysis.

ACCLAIMS Features

- ACCLAIMS is a fully integrated Instant Game system. Some of the key functions include:
 - Telemarketing
 - Inventory Control
 - Billing, Accounts Receivables and EFT
 - Claims Validation and Payment
 - Financial Management
 - Directors Information System
 - Sales and Regional Analysis Reporting
 - End of Game Reconciliation
 - Annuity Prize Payment.

ACCLAIMS Benefits

- Reduced system complexity:
 - Consolidates many functions within one system.

Multiple Environment Considerations

Key Issues

- b. Many manual tasks are required due to the lack of integrated systems. This results in:
 - Potential lack of data integrity and control
 - Delays in processing and analyzing data
 - Impacts morale due to pure clerical nature of tasks.

ACCLAIMS Features

- ACCLAIMS has complete integration to the general ledger:
 - All instant game transactions are automatically posted to the general ledger
 - Complete audit and balancing reports
- ACCLAIMS provides both standard and ad hoc financial reports:
 - Numerous standard reports
 - General ledger has an ad hoc report writer
 - General query tool for additional ad hoc reports
- ACCLAIMS has fully automated financial transaction processing, including:
 - Each operational transaction affects the financials and automatically creates a general ledger transaction
 - Complete audit trail for all financial transactions
 - Transactions are table-based driven, allowing flexibility in defining chart of accounts.

ACCLAIMS Benefits

- Increases confidence in the integrity of the Lottery information.

Multiple Environment Considerations Cont.

Key Issues	ACCLAIMS Features	ACCLAIMS Benefits
<p>3. The System/36 has been required due to the lack of a financial package and office automation on the Tandem. The System/36 has the following deficiencies:</p> <ul style="list-style-type: none">• Poor or non-existent system documentation has led to limited use of the financial packages.• The system is not accessible by all users.• The System/36 is becoming obsolete and will need to be replaced in the future.	<ul style="list-style-type: none">• Replaces Tandem, System/36, many PC applications and provides significant reduction of manual tasks.• AS/400 usage is a widespread and strategic product for IBM.	<ul style="list-style-type: none">• Reduces system complexity.• Reduces the manual interaction required.• Provides better access to the information required to support business decisions.
<p>4. While the PCs have brought some automation support to Lottery personnel, the PCs are not linked via a LAN. This results in a lack of data integrity and the inability to share data for reporting and analysis.</p>	<ul style="list-style-type: none">• Optional support for integrating PCs via a LAN.	
<p>5. There is no integrated office automation support. This impacts productivity:</p> <ul style="list-style-type: none">• Not all employees have access to word processing or electronic mail functions.• Some documents are prepared electronically, but cannot be shared because a common system does not exist.• Many reports and memos must be prepared manually.	<ul style="list-style-type: none">• Can provide complete office automation (Office Vision) to all users.	<ul style="list-style-type: none">• Increases productivity and confidence in data integrity. • Increases productivity.

Future Needs Consideration

Key Issues

Industry experience has shown that lottery support systems must evolve over time to support the changing needs of each state lottery. These changes reflect the fact that to increase sales, or maintain sales, new games or changes to the games are required. Some of the potential future needs of the Kansas Lottery may include:

1. Implementing cross redeems capability to increase player satisfaction, which increases sales.
2. Implementing on-line claim payment integration.
3. Implementing consolidated sales/billing system.
4. Implementing an automated retailer accounting system through the use of bar code readers at each retailer.
5. Implementing automatic ticket re-ordering and automated settlement processing.

ACCLAIMS Features

- Complete support for NON-GLEPS, cross-redeems environment available.
- Optional consolidation of claims payment for On-line game.
- Optional consolidated billing and sales reporting:
 - Automates billing function so retailers get one EFT sweep
 - Consolidates all retailer activity and sales.
- Complete support for retailer accounting through the use of available bar code readers.
- Optional automated retailer re-ordering and pack settlement.

ACCLAIMS Benefits

- Fully documented system and system design allows Lottery to modify/expand system as needed.

Future Needs Consideration Cont.

Key Issues

To implement these changes, the support systems must either have these functions available or must be designed to allow enhancements to the basic processing architecture. The current Kansas Instant Game system cannot meet either of these requirements for the following reasons:

1. The system is not designed for automated check printing, cross redeems or changes to inventory control functions.
2. The system does not allow the Kansas Lottery to offer more than three games concurrently. Other states, most notably Ohio, offer up to a dozen concurrent games. Their experience has shown that more concurrent games increase overall sales.
3. The coding structure of the system is not logically laid out, and the lack of good documentation and personnel resources make changes difficult to implement.
4. Assuming that changes can be made, as more changes are implemented, the odds increase that either the system will fail or unexpected results will occur.

These inherent limitations can result in limited sales increases or in higher support costs.

ACCLAIMS Features

- The Andersen team has experience with the latest technologies in the lottery industry. This knowledge encompasses: utilized bar coding to track ticket inventories; confirm ticket deliveries and settle packs, automated check printing and the check signing process for additional security. We have developed the only system that performs 100 percent validation of tickets in an on-line, real-time mode. Andersen can offer systems for both GLEPS and Non-GLEPS states and support cross-redeems of all mid and low-tier tickets.
- Multiple game support:
 - Up to 99 games
 - Each game has individual parameters to support changes in game structure.
- Fully documented system and system design.
- Parameter-based system with on-line help.

ACCLAIMS Benefits

- Fully operational base system is ready to install.
- Minimal time required to become operational, approximately four months.
- Dedicated development center for product enhancements.

KANSAS LOTTERY

Data Processing Acquisition Justification

Per

DISC Guideline 3608.00

February 26, 1992

CCT
Attachment 3
2-27-92

I. SUMMARY

The Kansas Lottery was authorized by statute to implement and run a lottery, with a percentage of revenues generated by the lottery to be placed into the State Gaming Fund. Money from this fund are distributed according to the dictates of the legislature. The primary goal of the Kansas Lottery as it relates to the Information Management function is to develop a fully integrated hardware and software configuration that will be flexible enough to accommodate the growth of the agency.

The hardware and software currently in use at the Kansas Lottery was acquired in 1987 from the British American Bank Note Corporation (BABN). Although BABN was the low bidder, the company had no experience in the lottery business, and more importantly, did not have any software developed at the time the bid was awarded. Consequently, the software that was delivered to the Lottery had many shortcomings. BABN has subsequently withdrawn all support for the software delivered. In addition, the manufacturer of the current hardware (Tandem) has announced that it will no longer support the system. (The Tandem equipment was supplied by BABN and was approximately 8 years old when it was installed in 1987.) In addition to the hardware and software just mentioned, the Lottery also uses an IBM System 36 to support word-processing, office automation, and some functions of the retailer licensing process.

The Kansas Lottery has given careful consideration to the management and effective use of hardware and software. The fact that the hardware will soon be unsupported and, the fact that the current software does not provide the support to effectively conduct Lottery business, has resulted in the recommendation that both the hardware and software should be replaced. As will be discussed later in this document, it is recommended that the existing Tandem computer system and the existing IBM computer system (used for word processing) be replaced with two IBM AS400s, and, that the existing software be replaced with a Lottery software package currently being used in other state lotteries.

This option will remove the high risk associated with using hardware which is not supported by the manufacturer. It is also the only option which eliminates the deficiencies of the current software in an acceptable time frame. The requested hardware and software will effectively serve the current Lottery operation for the foreseeable future.

II. BUSINESS CASE

As mentioned earlier, the Lottery currently uses a Tandem computer system and an IBM computer system. These two systems are operationally separated. The Tandem computer is used to support traditional data processing (production) applications at Lottery headquarters as well as in the regional lottery offices. For reasons of security, no additional communication lines are attached to the Tandem system. The IBM computer is used primarily to support word-processing, office automation, and some functions of the retailer licensing process at Lottery headquarters.

The ability of the Kansas Lottery to conduct business (as well as the ability to generate revenue) will be put at risk if the lottery is forced to use computer hardware that is not supported by the manufacturer. The ability of the Kansas Lottery to effectively conduct lottery business will be negatively impacted if the existing software is not replaced.

It is recommended that the existing Tandem computer system and the existing IBM computer system be replaced with two IBM AS400s, and, that the existing software be replaced with a Lottery software package currently being used in other state lotteries. This recommendation is the result of careful consideration after having reviewed the needs of the agency to effectively conduct lottery business. In addition to the hardware deficiencies already discussed, the following software deficiencies were also considered.

1. BABN software has very weak financial reporting capability.
2. BABN software does not provide full support for more than three active games.
3. BABN software does not perform exempt player validation.
4. BABN software provides limited support for sales reporting.
5. Redundant data is stored on the On-line game system and the instant system.
6. BABN software has slow turn-around for mid and high tier prize payments.
7. Current Instant ticket system has high ongoing costs associated with the application software and the hardware.
8. Employees with a knowledge of the Tandem computer system are difficult to retain.
9. BABN software is poorly designed and documented making changes difficult.

III. HARDWARE CONFIGURATION

A. Current Configuration

Equipment

TANDEM
EXT25 2 cpus
TXP 2 cpus
10 mb memory per cpu
16 128mb disks
6 256mb disks
40 crt terminals

IBM
SYSTEM36

Software

Guardian 90XF
Guardian 90XFERVISOR
Pathmaker
Measure
Safeguard
X25 Access Method
Cobol85
IXF

Displaywrite
PIZZAZ
SSP
RPG II
Query
Utilities
Business Graphics
Computed Assisted
Training

LottoStarts

B. Proposed Configuration

9406/E35 AS/400
9404/E20 AS/400
32mb memory
1.28g DASD
8mb memory
988mb disk

IV. STATE COMMUNICATION NETWORK CONNECTIVITY

No communications link currently exists between the State Mainframe and the Lottery computer systems. Maintaining the security of information residing on the Lottery computer systems is the primary reason that no communication link has been established.

V. DETAILER COSTS

IBM Hardware	Purchase Price
E20 AS/400	
9404-E20 SYS UNIT 8MB STORAGE LIC	\$ 62,002
7208-002 8MM CARTRIDGE TAPE DRIVE	5,538
5853-00z 2400 BPS MODEM	699
4028-AS1 LASERPRINTER 10 PAGES/MIN	5,596
3477-HCZ INFOWINDOW 3 YR WARRANTY	1,272
SUB-TOTAL	\$ 75,107
 E35 AS/400	
9406-E35 SYS 8MB 1.28G DASD RACK LC	\$ 58,944
9347-001 MAGNETIC TAPE DRIVE	7,338
7208-002 8MM CARTRIDGE TAPE DRIVE	5,538
9331-001 8 INCH DISKETTE UNIT	3,468
9336-010 DISK UNIT 942MB	29,874
9336-020 DISK UNIT 1714MB	19,134
9309-002 RACK ENCLOSURE, 1.6 METER	2,597
5853-00Z 2400 BPS MODEM	699
SUB-TOTAL	74,524
ESTIMATED HARDWARE TOTAL	\$ 149,631

IBM SYSTEM SOFTWARE	ONE TIME CHARGE
E20 AS400	
5738-SS1 IBM OPERATING SYSTEM/400 V2	\$ 9,007
5738-RG1 IBM SAA AD/CYCLE RPG/400 VER 2	2,028
5730-095 AS/400 APD	1,065
5738-PT1 PERFORMANCE TOOLS/400	1,428
5738-PW1 IBM AS/400 APPL DEV TOOL	2,028
5738-AF1 ADV FUNC PRT UTIL/400	2,325
5738-DCT LANGUAGE DICTIONARIES/400	472
5738-DS1 IBM AS/400 BUSINESS GRAPHICS	2,028
5738-QU1 QUERY/400	1,443
5738-WP1 IBM SAA OFFICEVISION/400 VER2	5,010
5738-CF1 POINT OF SALE COMM UT/400	2,238
5738-CM1 IBM AS/400 COMMUNICATIONS UTIL	3,731
5738-PC1 PC1 PC SUPPORT/400	2,216
5738-001 AS/4000 EDUCATION SERIES	1,111
5696-003 AS/400 APPL DESIGN & DEV TOOLS	451
5696-005 AS/400 OFFICE SUPPT ADDL TPICS	406
5733-079 IBM DISCOVER/EDUCATION RPG PGM	1,045
5733-056 MANAGE/400 COURSE - AS/400 (R)	1,164
SUB-TOTAL	\$ 39,105
E35 AS400	
5738-SS1 IBM OPERATING SYSTEM/400 V2	\$ 14,608
5738-AF1 ADV FUNC PRT UTIL/400	4,548
5738-PT1 PERFORMANCE TOOLS/400	2,771
5738-QU1 QUERY/400	2,126
5738-CF1 POINT OF SALE COMM UT/400	4,380
5738-CM1 IBM AS/400 COMMUNICATIONS UTIL	7,312
5738-PC1 PC1 PC SUPPORT/400	3,240
SUB-TOTAL	\$ 38,985
ESTIMATED SOFTWARE TOTAL	\$ 78,090
COST OF INSTALLATION	
SETUP	
CONVERSION OF DATA	
OPERATIONAL TRAINING	
DOCUMENTATION TRAINING	
PROGRAMMER FAMILIARIZATION	
POST INSTALLATION SUPPORT	
ESTIMATED TOTAL	\$ 400,000
IBM ONLINE TICKET PROCESSING SOFTWARE	\$ 330,000

(EXACT COSTS WOULD BE DETERMINED BY RPF)

VI. IMPLEMENTATION ISSUES/COSTS

As noted in the COST OF INSTALLATION of section V., the training of existing personnel would come from the selected vendor, along with the online computer tutorial. The staff would have the expertise of the local IBM staff as well as being able to train at a pace which is inline with normal operating events.

The migration process will utilize the existing staff, along with the staff of the selected vendor, combined with a comprehensive plan to implement the changes in an orderly and timely manner.

VII. RELATED SAVINGS AND BENEFITS

Acquisition of the proposed hardware and software will result in a tremendous improvement in the area of financial reporting. Improved financial reporting capability by the Kansas Lottery has been requested in prior years by the Kansas Legislature. While it is difficult to project a dollar amount, it is clear that having a financial package which provides accurate information in a timely manner will allow the Lottery to operate in an even more efficient manner.

A detailed discussion of the cost benefits of this proposal may be found section VI of the KANSAS LOTTERY INFORMATION PLAN.

VIII. OPTIONS THAT WERE ANALYZED

* OPTION 1: Replace the current hardware and software

This option will provide the same modern computer hardware and software being used by other lotteries. Hardware and software deficiencies will be eliminated, and will serve the needs of the Kansas Lottery for the foreseeable future.

This option has been recommended and approved by the DISC analyst assigned to the Lottery. In addition, this option has been reviewed by the Division of the Budget, and has been recommended by the Governor in the FY93 budget.

Estimate of hardware and software costs: \$930,000 - \$1,070,000
(Exact cost will be determined by RFP)

* OPTION 2: Replace existing hardware and re-write existing software

This option will provide modern hardware and improved software after some indeterminate time. Implementation will require a complete redesign of the existing software system. Three additional staff members will be required to accomplish this task. The length of time required to re-write all software will be significant. Current estimate is three years. Please note that current deficiencies will not be resolved until the project has reached completion. Project will also require the acquisition of a general ledger package to be integrated into the software.

Estimate of hardware costs: \$145,000
Estimated cost of additional staff: \$170,000
Estimated cost of general ledger: \$ 60,000

Total: \$375,000

* OPTION 3: Keep existing hardware and software

This option is the least desirable. As previously stated, lack of hardware service/support by the manufacturer could easily result in the Lottery computer hardware being unusable. This would severely impact the Lottery's ability to generate revenue.

Software deficiencies previously described will not be resolved. These deficiencies impede the Lottery's ability to effectively conduct business. The negative impact of these deficiencies in future years will certainly be greater than today.