Memorandum

Date: March 9, 1998

To: Kassandra Agee-Letton, Manager, Network and Information Systems

From: Robert E. Brydia, Chairman, Core Software Review Swat Team

Re: Report on E-Mail Software Standardization Results

Introduction

A variety of software packages are in use throughout the Texas Transportation Institute. Many of these packages have been in use for years and were chosen originally on the basis of a feature set not available in other packages. The software in use covers all aspects of our business, including E-mail, calendaring, word processing, desktop publishing, spreadsheets, and presentations to name but a few.

The charge given to the core software review swat team was to examine the current software packages in each of the major areas and pick the best package and feature set to meet the current and future needs of TTI.

The remainder of this report addresses the findings of the team for the first software area examined, electronic mail.

Electronic Mail

Electronic mail (e-mail) has become the communications “tool of choice” at TTI as well as many public and private entities. TTI currently uses Mailman, which runs on the Banyan network, as it’s primary mail package. While Mailman has functioned well for a mail package for the Banyan Vines network, TTI is moving to from Banyan Vines to Windows NT as a network operating system (NOS). The use of Mailman will no longer be available as an option. With a new messaging system on windows NT, a wider variety of packages with additional features are available. Prior to any significant cost investment in either an upgrade of the existing package or
the purchase of a new e-mail package, it was felt that the core software review swat team should be involved in the process.

The purpose of the e-mail evaluation is to compare the functionality and features of various e-mail clients. The technical aspect of how e-mail is delivered to the client was of secondary importance. Identifying current and future needs, portability, reliability, ease of use, were the main tasks of this evaluation.

**Evaluation**

The evaluation process for electronic mail packages consisted of the following steps:

- Pre-screening of available packages
- Installation and use of packages in work situations by team members
- Group decision from team members on package of choice

The pre-screening of packages limited the evaluation to eight e-mail programs, which included Pegasus, Eudora, Calypso, Beyond Mail, Microsoft Outlook, Microsoft Outlook Express, Netscape Mail and Shark!Mail 4.0. These packages were chosen for evaluation based on their feature set, their installed base, their ability to connect to the next generation TTI messaging system, and their pricing structure.

Each package was installed and evaluated by at least two members of the team. Team members were encouraged to utilize their new e-mail package in all communications and to explore the feature set of the package, particularly any advanced features that could be used to improve automation and efficiency. NIS staff provided installation and working experience with the packages.

As a result of the evaluations, a base set of desired features quickly became evident. A number of packages were discarded from further consideration based on items such as a poor or confusing interface, no spell checking, confusing and non-standard attachment capabilities and cost. The list below identifies each package that was removed from consideration and a brief explanation as to why.

- Pegasus - Confusing interface, simple tasks difficult to accomplish
- Eudora - Freeware version lacks spell checker and standard attachment features
- Calypso - Installation problems, inability to achieve consistent working ability
- Beyond Mail - confusing high-powered features, very costly ($80 per seat)
- Netscape Mail - lack of any advanced features
- Shark!Mail 4.0 - Very costly ($60 per seat)

The two packages left after the initial review were Microsoft Outlook and Microsoft Outlook Express. Microsoft Outlook Express is a no-cost stand alone e-mail package that offers several advanced features such as e-mail filtering, the ability to poll multiple accounts, flexible
attachment decoding and execution in addition to basic features such as spell checking and an attractive interface.

Microsoft Outlook combines the power of Outlook Express with the additional capabilities of group calendaring, contact list, task list and other functions of a personal information manager. These features come at a moderate price cost of $22.00 per seat. In addition, Outlook has the ability to communicate with a variety of mail server protocols, which matches well with the Exchange mail service being set up for the NT network. (Exchange is a centralized mail store server that features very strong management capabilities.) Outlook is written to interact with the Exchange mail server on a number of levels, including mail retrieval, mail store, filtering and attachments. Outlook is the only package that will take full advantage of the Exchange features.

Although not a function of the current evaluation, the team was also aware that the move to a different network operating system meant that a replacement to the popular On-Time package would be necessary. The ability of Outlook to solve the group calendaring need in addition to its electronic mail capabilities was seen as a very positive feature. The final meeting of the team examined many of the group calendaring functions of Outlook with the conclusion that the package was as strong or stronger than the current implementation of On-Time in all areas and was more tightly integrated into electronic mail for arranging meetings.

**Recommendation**

Based on the lengthy review process and on-hands evaluation of several electronic mail software programs, the Core Software Review Swat Team recommends that the Texas Transportation Institute implement Microsoft Outlook as the new e-mail client. The key features of Outlook that make it the package of choice are:

- Attractive, easy to use interface
- Full support for advanced features of Exchange mail server
- Full support for sending and receiving attachments
- Support for multiple e-mail accounts and intelligent polling
- Advanced e-mail capabilities such as filters and “On Vacation” messages
- Integrated calendaring features
- Integrated PIM (Personal Information Manager) features
- Attractive pricing ($22 per seat, ability to combine Microsoft Office Professional license for a total of $41 per seat)
- Ability to be used on machines at remote locations for e-mail, including the ability to answer messages off-line for reduced long distance phone charges.