MEMO TO: UNIVERSITY COMMUNITY

FROM: MERI WHITAKER, DIRECTOR VI-EPSCoR

SUBJECT: CGNET INFRASTRUCTURE ASSESSMENT EXECUTIVE SUMMARY

The University of the Virgin Islands (UVI) and the Virgin Islands Experimental Program to Stimulate Competitive Research (VI-EPSCoR) engaged CGNET Services International to review the University's existing and planned cyber-infrastructure. CGNET is an internationally recognized consulting firm which has undertaken similar studies over the last 25 years. This effort was led by a committee designated with overseeing the task of the assessment and reporting the results back to the University Community. Dr. Meri Whitaker chaired this committee, which included Dr. Nasseer Idrisi, Mr. Stevie Henry, Mrs. Tina Koopmans, and Dr. Lynn Rosenthal. The process, approved by the committee, included several meetings with faculty, staff and students on both campuses and much interaction with the Information & Technology Services staff.

The goals of the study were to determine the extent to which the present infrastructure - including the University's network, the devices attached to it, and its connections to the Internet – is stable and has the best design, maintenance, security and redundant elements to support existing functions. The study also assessed UVI's readiness for future development, including wireless systems, increased Internet and Internet2 capacity with the ability to switch between multiple ISPs when one is inaccessible, and expanded data storage and management capabilities.

In 2004, the University's library and technology resources were combined in one administrative component, Information & Technology Services (ITS), which manages the University's computer and network needs. The group manages the University's local and wide area networks, its Internet access and its telephone system; instructional services infrastructure including video conferencing, smart classrooms and online instruction; desktop and laptop computers on the network, as well as the academic and administrative applications that faculty, staff and students use.

As noted in the study, in the past two years, the University has undertaken significant planning efforts and made major investments to upgrade the basic network infrastructure. CGNET affirmed that the network is capable of supporting the current and near-future network loads, provided investments in equipment maintenance, upgrades and service agreements continue.

The study found that systems exist to authenticate users on the network, email is filtered removing or segregating spam before it reaches the desktop, and a university-wide backup system is in place securing data kept on all servers.

CGNET emphasized, additional bandwidth is essential to the proper utilization of network resources. They suggest, the introduction of Internet2 connections first to the St. Croix, then the St. Thomas campus, will positively impact faculty, staff and student access to high-speed, reliable networking.

The study found that hardware and software to support applications such as email, Blackboard and Banner are up-to-date. Simple web accessible interfaces have been made available to all. Documentation was created and disseminated.

Banner is a Web-based application providing access to the University's academic, business and employee. During the review, ITS was in the final stages of upgrading the Banner system's Oracle database to the latest version. Users tested the upgraded system prior to applying changes to the production environment. The review noted that Banner data is backed up every day with a replica system available for continuity and testing.

The Blackboard Academic Suite is a Web-based application used by the University to provide distance learning and to supplement traditional classes with online materials. The review found that the Blackboard system has been recently improved, by adding two front-end servers and two back-end servers, which has added redundancy to the system. The software has also been upgraded to the latest version.

The report noted the levels of support provided the UVI community via the ITS call center. While front line support is done via the telephone, calls requiring escalation are handled by the same technicians who support videoconference rooms. While the staff is highly motivated, they are under a lot of pressure to resolve issues.   CGNET recommended the addition of staff—either by adding students to support videoconference functions or by adding desktop support personnel—would be necessary to improve response time from the helpdesk.

The CGNET study stated that the University has assembled a team capable of managing the new network and with sufficient skills to resolve issues as they arise. The study went on to recommend the addition of a system administrator position to cover gaps in server and application maintenance to continue to improve uptime. The study suggested that the University continue the investment in training current staff and seek resources to add senior-level technology positions to the ITS organization to support its varied technology needs.

The study concluded that the information technology infrastructure investments made in the past years have resulted in a stable system, with upgraded local area network speeds and upgraded servers. These efforts have built an excellent foundation to support current services and future expansion.

The report further suggests that work be done in some areas, particularly the importance of increasing Internet access to meet current and future needs for teaching and research, improving communications both between the University's campuses (over the microwave) and individual stakeholder groups, and adding campus-wide wireless connectivity.

The University community is encouraged to read the report in depth and can send any comments or questions to the committee.