

ODP Policy: Use of VSAT Service Onboard the JR during FY03

(Revised May 7, 2003)

Introduction

This policy applies to all users of the VSAT satellite telecommunications system installed on the JR and managed by ODP/TAMU. The ODP Communications policy, located at <http://www-odp.tamu.edu/isg/policies.html>, applies to the use of the VSAT system, except for the portion related to e-mail charge back. In the case that VSAT is not available, the charge back section of the policy will apply since e-mail will be sent via the Inmarsat B satellite system. The Inmarsat B system will also be available since it can coexist with the VSAT system. While overall use of the VSAT system will be free of cost (except long distance calls) to all shipboard participants, the access to VSAT will be monitored and managed from shore by ODP/ISD.

A number of services will be provided to those onboard the JR. The services include: telephone, file transfers and e-mail, access to shipboard servers for shore-based systems managers, World Wide Internet access, and video conferencing.

Telephone Service

Five telephone lines will directly connect the ship to shore. The five lines will be connected to the ship's PBX system and programmed in the following manner. First, the following authorized office phones on the ship will have exclusive access to three of the lines for business calls: TSO Radio Room, TSO Radio Room (FAX machine), TSO Ops Office, Lamont Down Hole Office, LDEO/Schlumberger Unit, ODP Systems Manager's Office, ODP Ops Office, ODP LO Office, and the ODP Staff Scientist Office. Second, two public phones, located in the TSO Training Room and the ODP Conference Room Telephone Booth, will have access to the remaining lines for personal calls. All five lines will be terminated on the campus of Texas A & M University and will grant access to the campus dial tone and local Bryan, Texas Local Access and Transport Area (LATA). All calls made outside the campus or LATA area are subject to long distance charges. Shipboard members may use a calling card (available for purchase onboard the ship) or credit card for long distance phone calls.

Incoming telephone calls will be limited to the authorized office phones noted above. The ship will be assigned one phone number from shore that will be used for all business calls to the ship. The caller will then be able to route their call to any of the authorized phones. No incoming calls will be allowed on the two public phones.

File Transfer and E-mail Service

File transfer services will be available over the VSAT system. However, only one-way file transfers using FTP and initiated from the ship will be supported. Use of the Inmarsat B system for file transfers will initiate a charge back to the individual or organization.

All e-mail will be sent using VSAT. In those situations where a suitable signal is unavailable for a protracted time period during which attempts at re-acquisition are fruitless, the Inmarsat B system will be used to send e-mail. E-mail will be exchanged with shore every hour as a batch process. GroupWise remains the official business e-mail server for ODP/TAMU and its current configuration on the ship using Inmarsat B will remain as a backup to the DMS VSAT service. The shipboard party may use any computer to read and send e-mail in the GroupWise system. Also, some users may be able to access Internet-based web access mail servers from specified workstations located in the Internet Caf , i.e., ODP User Room (see section on World Wide Web Service). While there will be no charge for e-mail service while using the VSAT system, charges as defined in the ODP Communications Policy will apply while using the Inmarsat B satellite system.

Systems Management Service

Authorized ODP/ISD shore-based personnel will be allowed access to the ship s UNIX, Oracle, and NetWare servers and the ship s Ethernet network for purposes of managing systems , configuring software and systems, loading software, EOL/BOL, troubleshooting, etc. Access to VSAT electronic components will be granted to DMS/Schlumberger technicians for maintenance work, as needed. Access to communications equipment located on the TAMU campus will be available to TAMU CIS/TTVN staff as needed. Inappropriate use of the Internet by participants on the JR may result in TAMU/CIS removing the JR from the Internet until corrective action is taken by ODP, upon which Internet service will be restored.

World Wide Web Service

While VSAT allows access to the World Wide Internet, bandwidth restricts the number of simultaneous sessions available. In order to keep performance levels acceptable, ODP will use an Internet caf approach to manage access. The following roster of workstations will be available for Internet access:

- User Room - 4
- LO Office - 1
- MCS Office -1
- Staff Scientist Office - 1
- Ops Mgr. Office - 1
- LDEO Office - 1
- LDEO/Schlumberger Unit - 1
- Video Conferencing - 2
- TSO Training Room -1
- TSO Engine Control Room - 1.

In order to protect the integrity of the shipboard network and provide for orderly operations, no other shipboard computers, including individual laptop computers, will be allowed to connect to the Internet. Any changes to the above roster will be made only by shore-based, authorized ISD personnel, and only after this policy has been updated and approved by the ISD Manager.

Access to the Internet is considered the lowest priority service to all other VSAT services. Any workstation allowed access to the Worldwide Internet from the ship will not be allowed to host any Internet services (e.g., file sharing, http, and Telnet), stream audio or video, or run instant messaging. Absolutely no private, non-ODP-approved network equipment (in particular, routers) will be allowed on the ship's network. The network will be monitored for unauthorized equipment and any violations of these procedures will be taken seriously.

Video Conferencing Service

While not currently implemented, the VSAT system will eventually allow for two-way video conferencing between ship and shore for distance learning, technical, training, business problem solving, various business meetings, administrative briefings, etc. While initial uses of video conferencing will focus on fixed camera locations, such as in a conference room, use may extend out to a roving camera and the ability to view core from shore as it is being processed.

Management of VSAT Services

While every attempt will be made to provide access to these services, not all services can be provided simultaneously over the 192 Kbps circuit. To ensure that sufficient, or at least some, bandwidth is available for each service, satellite services have been assigned a priority code (1 - 5, highest priority being 1). The following chart indicates the type of VSAT service provided, its priority relative to other VSAT services, and the bandwidth that each service at capacity is estimated to consume. If high priority services are not in use, bandwidth is automatically allocated to all lower priority services. When a higher priority service is initiated, it is given its share of the bandwidth at the expense of lower priority services. In the case of insufficient bandwidth or conflicts in the use of the system, the ODP/TAMU Director, Deputy Director, or ISD Manager will resolve the use of the system, whoever is readily available.

| <u>VSAT Service</u> | <u>Priority</u> | <u>Bandwidth (1,000 (K) bits per second)</u> |
|----------------------|-----------------|-------------------------------------------------------------------|
| Video Conferencing | 1 | - Kbps (video conferencing may consume all bandwidth when active) |
| Telephone | 2 | 28 Kbps |
| File Transfers (FTP) | 3 | 64 Kbps (Includes e-mail service) |
| Systems Management | 4 | 28 Kbps |
| World Wide Web | 5 | 72 Kbps |
| TOTAL USAGE | | 192 Kbps |

Maintenance of VSAT System

Since the VSAT system is rented, all maintenance is included in the rental fee and will be provided by the vendor, DMS/Schlumberger. Maintenance activities will be coordinated on shore by ISD personnel and on the ship by the Marine Computer Specialist. Inmarsat B must be kept as a backup system to the VSAT system. The vendor and ODP/ISD will use Inmarsat B to troubleshoot problems with the VSAT system. The onboard ET may be asked to provide assistance. Onboard spares are available and should be used only under the direction of DMS/Schlumberger.