

# HOW HELLESPONT RUNS ITS I.S. ONBOARD WITHOUT BROADBAND COMMUNICATIONS

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HOW TO MANAGE EXPENSIVE  
AND SLOW SPEED LINKS  
AND AVOID MISUSE

# Overview

- Satellite Communications Cost Money
- Ships need to synchronize and communicate
- Synchronization can be done via e-mail
- e-mail can be misused
- YOU pay the cost

# Introduction

- Hellespont
  - 3 Suezmax tankers using mini-M and sat-B
  - mini-M:
    - 2400 bps i.e            18Kbytes / minute ?
    - reality                    9.6Kbytes / minute
  - Cost :                      \$1/minute

# Transfer layer

- Communication systems/protocols
  - 10secs overhead
  - have to be fast
  - may use common format or compression
  - automatic restart if fail
- Hellespont
  - Taylor uucp protocol i
- Other systems
  - maybe compression can achieve 20-25% better
- But .....
- 20-25% will not save you from misuse

# Integration - Maintenance

- Any system must :
  - integrate with rest of IT
  - cooperate with other applications
  - be easy to operate and maintain
    - office
    - on board
- e-mail
  - Standard
    - used everywhere, everybody knows it
    - integrates with everything
    - easy to maintain
  - maybe best for low speed integration
  - can be used for synchronization

# But.....

- Shore Users
  - easy to be seduced by e-mail
    - just click to reply.....
  - ignorance is not bliss
- Improved cameras/scanners
  - 5MPixel => 1 photo = \$100
  - scanning as interface to incompatible systems
- Authorities
  - big forms (tiff, xls)
  - print/fill
  - send back

# Less Text

- Text not common anymore
  - .doc, .xls, .tif, .jpg
- 3 parts e-mail:
  - text 50K
    - 10bytes *Thank you*
    - 50Kbytes *>>>> Original Message <<<<*
  - htm part 70K *the same !!!!!*
  - attach 200Kb .doc *eye candy!!!!*
  - \$37 for a “thank you”.
- SPAM, viruses, junk, chain-mail
- You pay for junk
  - And potentially blocking vital voice calls

# Solutions

- TRAINING
  - Simple instructions
  - Constant feedback
- C/P or TERMS OF USE
  - Pay or obey
  - Third parties/Users pay
- AUTO-CC: to Management Team
  - No sender action
- Special ship e-mail address
  - not easy for harvesters
  - can be filtered, turned off, redirected

# Solutions (cont)

- White/Black Lists
  - specific white list, all others blocked
    - need to be watched
      - maybe worths it
- Tools to reduce size
- Filters/checkers
  - file type restrictions (.pif, .src, .exe, .bat etc.)
  - virus / spam checkers
  - Size limit
    - small
    - bounce to shore side operations
    - announce less than the real

**END**

**QUESTIONS**

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