8D: Network Standards and Interoperability

• Good progress is being made in several implementations of the SLE Service Management standards
  – JPL/NASA DSN, NASA/CSOC, VEGA (UK), AFSCN
  – Recent shift in approach is good: implement some features, try it with users, get feedback, implement some more
  – Important to involve users in trials, not just developers and service providers
SLE Service Management Standards

- Functions initially implemented are exchange of contact schedule, configuration, and orbit data
- Participants suggested other functions to support: view entire schedule, get tracking data, get RTS status (real-time and trend data), accounting, security
- Most implementations still have “air gap” to legacy scheduling and config. systems
Internet in Space

• Space shares features of other emerging Internet environments
  – Mobility, noisy links, long delay, low power, asymmetric data rates
  – Can utilize emerging Internet enhancements, such as Mobile IP, bandwidth reservation, selective Nack

• Recent demo by CANDOS in Shuttle bay

• May be alternative to CCSDS space links & SLE
  – But does not provide all the same services/features

• User conservatism remains to be overcome