Transport for Satellite
draft-jones-tsvwg-transport-for-satellite-00

Tom Jones, Gorry Fairhurst, Nicolas Kuhn, John Border, Emile Stephan

Transport for Satellite

- tcpsat wg produced RFC2488 and RFC2760 (concluded 2000)
  - TCP features that require tuning for satellite deployment

- Modern satellite services:
  - Are much faster than 20 years ago!
  - TCP over satellite today is accelerated by PEPs

- However:
  - PEPs are a deployment barrier to new features and are impractical for QUIC, VPN, etc
  - A range of satellite systems and orbits: LEO, MEO, Hybrid terrestrial, etc

Satellite systems require path awareness

- Satellite systems:
  - Point-to-point links or TV broadcast
  - Use as an access technology for remote locations
  - Backup and rapid deployment of new services
  - Transit networks
  - Backhaul of various types of IP networks

➢ Satellite: **IP network segment one part of the end-to-end path**

- User traffic can experience a path that includes:
  - Satellites capacity (long delay link, variable delay links, etc.)
  - With a wide variety of other network technologies (Ethernet, cable modems, WiFi, cellular, radio links, etc)

Draft structure

Description of SATCOM systems

System characteristics

On path migitation technics

Generic transport mechanism that are affected by satellite

Draft structure

TCP mechanisms

QUIC mechanisms

Questions

- Path awareness helps
  - End users can know the characteristics of SATCOM systems
- The draft describes methods to overcome from SATCOM systems characteristics
- We need help from LEO / MEO actors

- Is this work of interest to PANRG ?
- How should we move on with this draft ?