



# Using PPPoE with LLT Mechanism

December 11<sup>th</sup>, 2001  
52th IETF – Salt Lake City

Codaccioni Yann - FTR&D/DMR/SRS

# Agenda



➔ Objectives of the architecture

➔ Network Architecture

➔ Advantages

➔ Planning

# Objectives of the architecture

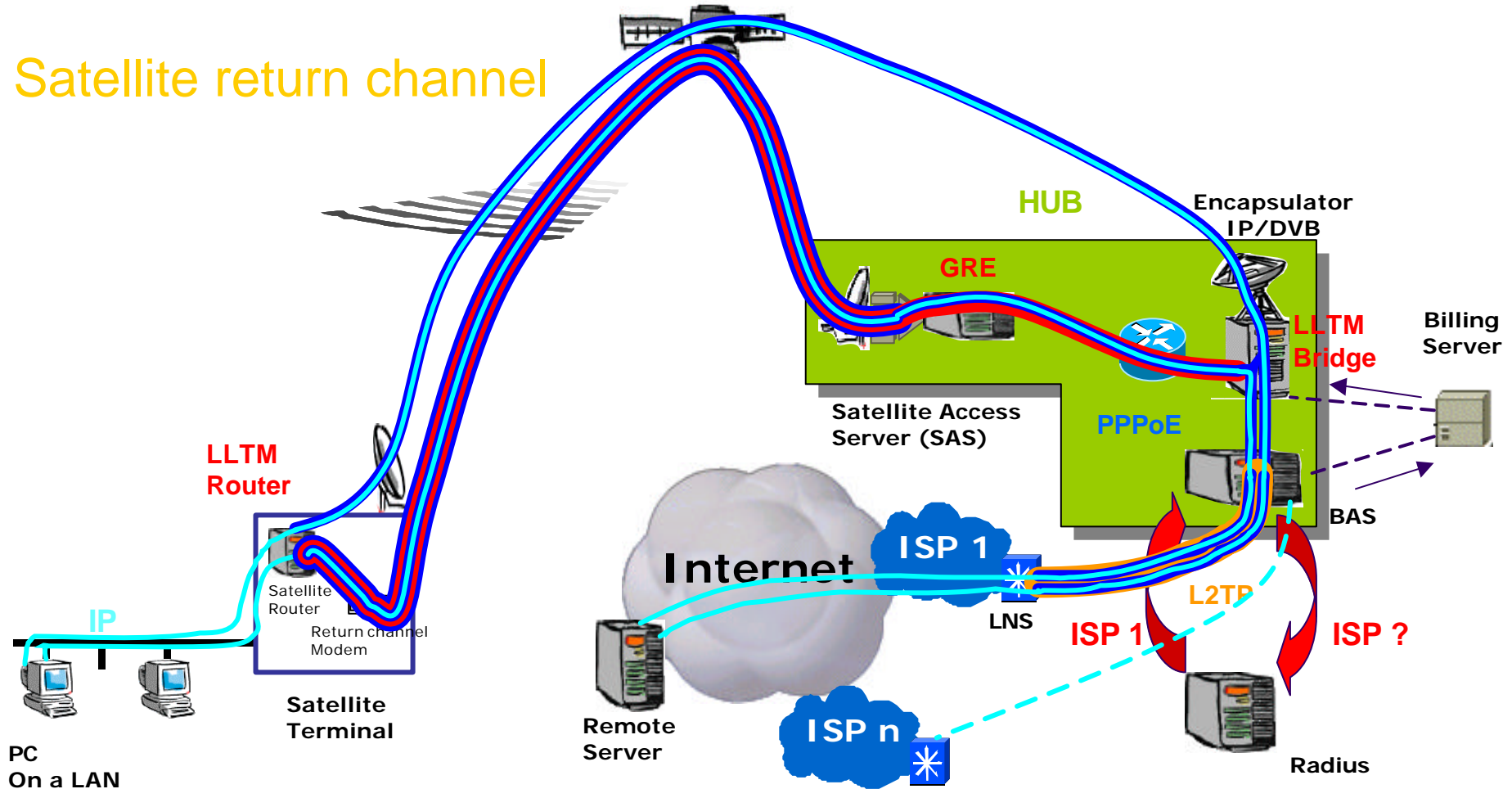


- ➔ Satellite Local Loop : broadband bi-directional access to the Internet
  - Over 128 Kbps for the uplink and up to 40 Mbps for the downlink
  
- ➔ Based on ADSL model
  - Multi ISP configuration
  - Re-use of the ADSL management system (accounting, billing, etc.)
  
- ➔ Return channel flexibility : satellite or terrestrial
  
- ➔ Implementation of new services : interactive multicast (n to n)



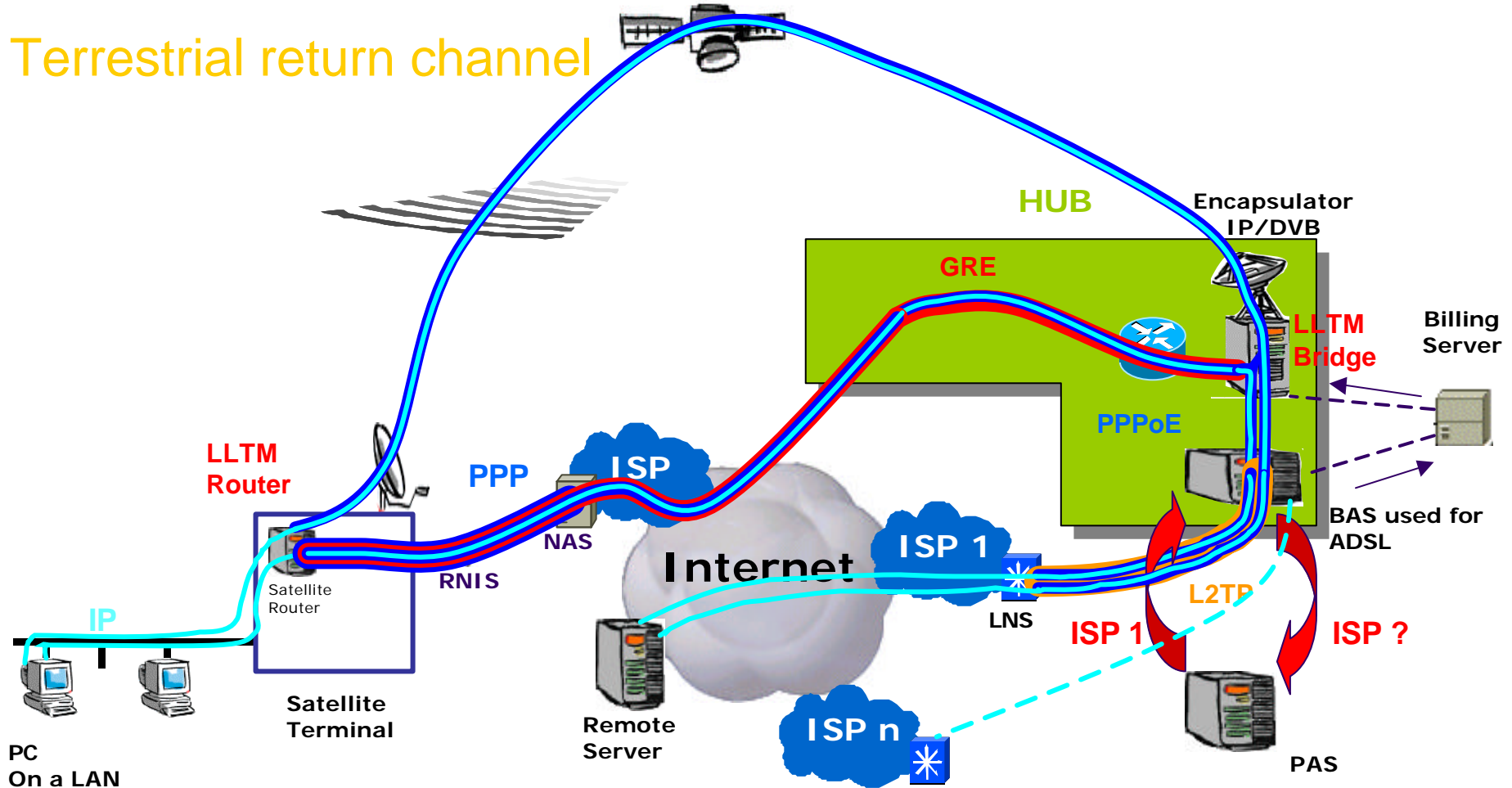
# Network architecture (1/2)

## Satellite return channel





# Network architecture (2/2)





# Advantages

- ➔ Interconnection with a BAS (Broadband Access Server) :
  - Satellite bi-directional Layer 2 Connectivity
    - Convergence point directly connected to the BAS
    - PPPoE supported
  
- ➔ Return channel flexibility
  - Either satellite or terrestrial return channel can be used
  - Standby terrestrial link
  
- ➔ Compatibility with all IP world :
  - Important for multicast
  
- ➔ Multi-ISP configuration
  
- ➔ Complementarity with the ADSL

# Planning



- ➔ Unicast :
  - Concept validation already done in FTR&D laboratory
  
- ➔ Multicast Support : **PPP connection type only for Unicast flows**
  - Multicast offered by ISP : to be studied
    - Via the BAS without using PPPoE
  - Multicast directly connected through the Gateway
  
- ➔ Commercial exploitation
  - Beginning during the year 2002