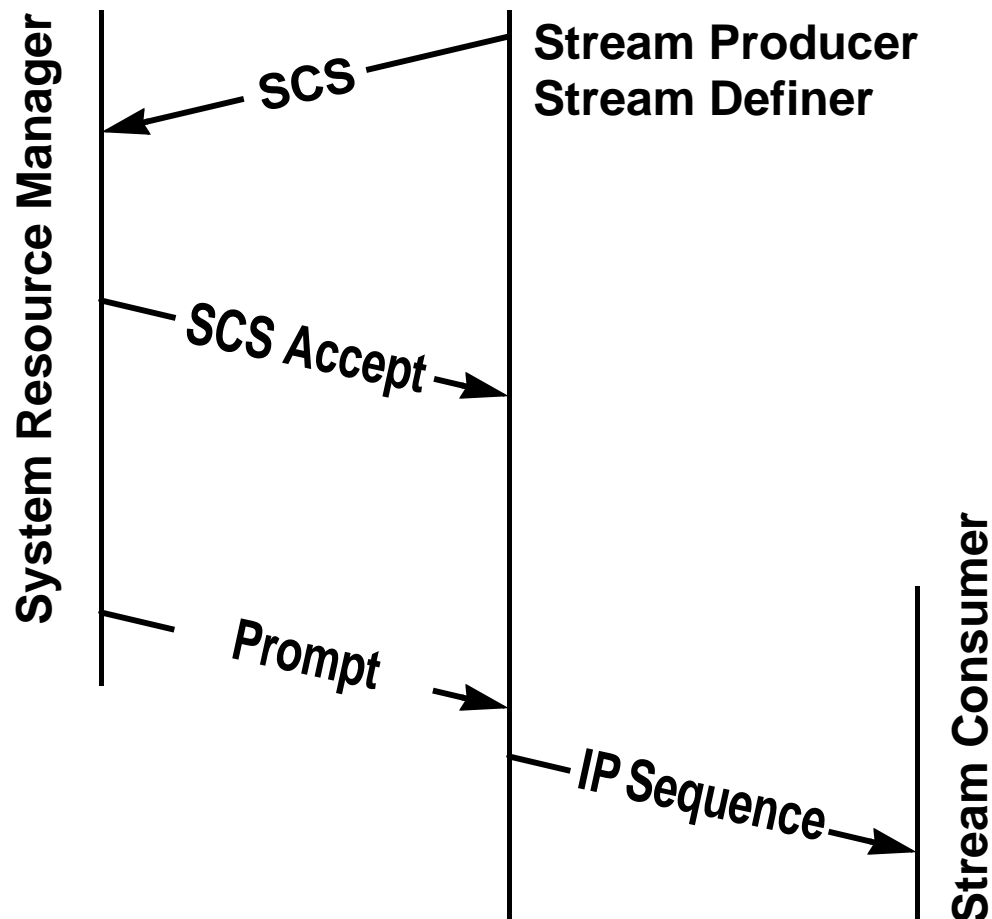# FC–AV

# IP on Streams

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# FC–AV – IP on Streams

## Class 2 & 3 Stream Environment

- ☯ All Fibre Channel traffic is required to be carried in a Stream, when used in a Class 2/3 Stream environment
  - ❑ IP traffic should be carried in an Asynchronous Stream
  - ❑ IP traffic may be carried on an Available Bit Rate Stream
  - ❑ IP should not be carried on a Real–Time Stream
    - ⇘ Except for IP traffic integral to the Real–Time Stream

- ☯ IP flow example (Sequence level)

# FC–AV – IP on Streams

## IP flow example (Continued)

❑ The Stream Producer, as the Stream Definer, sends a Reserve Asynchronous Stream (RAS) request to the System Resource Manager (SRM) as part of a SCS (Stream Control Services) Extended Link Service command, when it desire to transfer an IP IU (Sequence) to a given Stream Consumer

↳ A single RAS request may carry multiple IP IU requests for a single destination

❑ The SRM responds back with an acceptance (Accept Reserve Asynchronous Stream [ARAS]) reply in the SCS Accept Sequence

↳ The ARAS response may be returned immediately, i.e in the first SCS Accept, or in any subsequent SCS Accept Sequences

↳ The acceptance reply identify the Time Slot for Stream #0 (The Asynchronous Stream) at which time the IP IU is to be transferred

❑ The Prompt Extended Link Service Sequence broadcast, every 1/64 sec, by the SRM identify the current Time Slot value for each of the up to 256 Streams

❑ The Stream Producer sends the IP IU when the Time Slot value for the Asynchronous Stream (0) arrive

↳ If multiple transferred are assigned to the same Time Slot, then they are serviced (transmitted) in the order assigned by the SRM, i.e. the order of the ARAS replies

# FC–AV – IP on StreamsFC–AV – IP on Streams

## Class 4 Stream Environment

- A mixture of Class 4 Streams and non–Streamed Class 2 or 3 may be carried in a Class 4 Stream environment
  - ❑ IP traffic integral to the Class 4 Stream may be carried in a Component Stream
    - ⇨ A separate Component Stream should be defined for this purpose
  - ❑ IP traffic not integral to Stream operation should be carried in either Class 2, 3 or non–Streamed Class 4

- Class 1, 2, 3 or 6 Streams can not be used in a Class 4 Stream environment