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FUNI

ATM Forum, Frame Based User to Network Interface Specifications 1995-09

FUNI was developed by the ATM Forum in order to provide users with the ability to connect between ATM networks and existing frame-based equipment (e.g., routers, etc.). FUNI uses a T1/E1 interface and offers a relatively easy and cost-effective method for users to take advantage of ATM infrastructure or an ATM backbone, while not having to replace existing equipment with more expensive ATM equipment.

The frame structure of FUNI is shown in the following illustration:

FUNI PDU				
Flag	FUNI header	User SDU	FUNI FCS	Flag
	2	1-n (n<=4096)	2 (up to 4)	1

FUNI frame structure

The FUNI header is as follows:

8	7	6	5	4	3	2	1
Frame address						RSVD	0
Frame address			CN	RSVD	CLP	1	

FUNI header structure

RSVD

Reserved bits for interface management. These bits are set to 0 unless the frame is used for management.

Frame address

Octet 1, bits 6-3 are mapped to the 4 LSBs of the VPI in the ATM cell header. The 4 MSBs of the VPI are not coded in the address field. Octet 1, bits 8 and 7 and octet 2 bits 8-5 are mapped to the six LSBs of the VCI in the ATM cell header.

FCS

16 bit frame check sequence.

CN

Congestion notification. If the PTI=01x in the last ATM cell composing the FUNI frame, the CN is 1 for the FUNI frame, otherwise it is 0.

CLP

The network equipment copies the CLP bit sent from the user equipment into the CLP bit of all ATM cell headers constituting the FUNI frame. The CLP bit from the network equipment to the user equipment is always set to 0.