



ADSL Protocol Reference

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About the Author

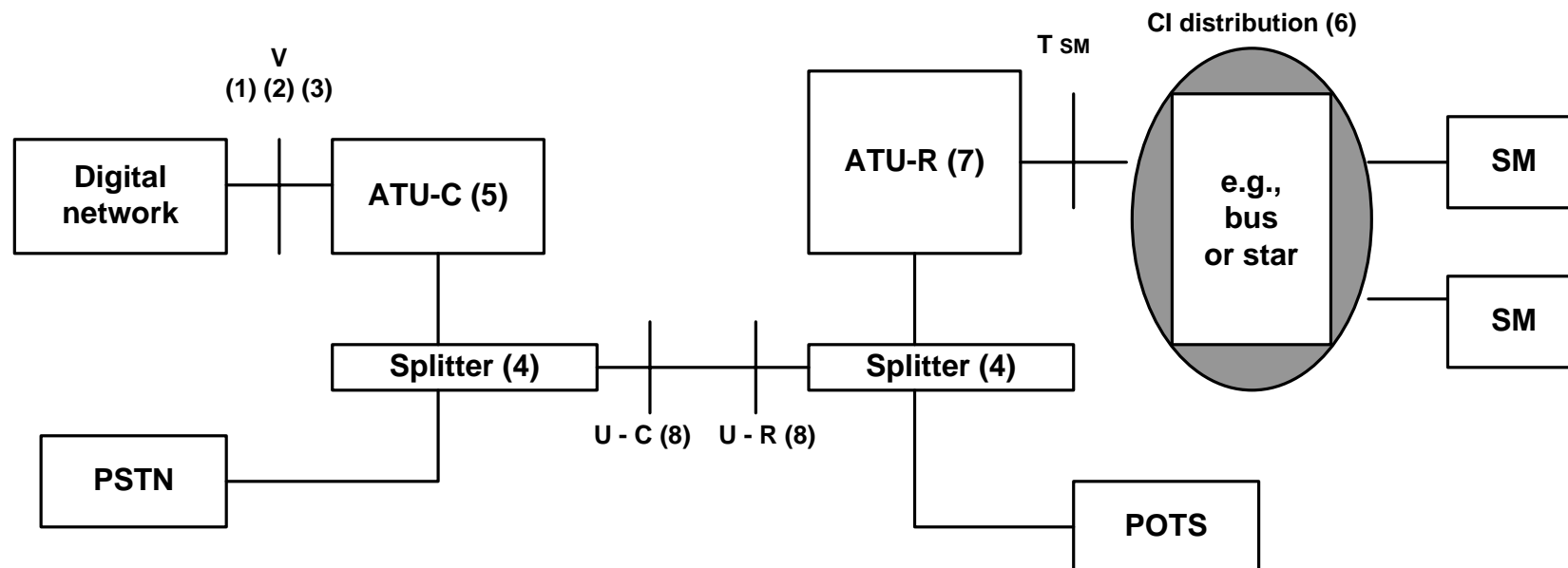
Benoît H. Dicaire is the founder and Information Security Strategist for INFRAX.

With nearly two decades of experience providing key strategies and technology solutions for managing information security risks, Dicaire now focuses his work on Security Posture Assessment and Enterprise Architecture for organizations in Canada and around the world.

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About INFRAX

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**Notes :**

- (1) The V interface is defined in term of logical functions ; not physical.
- (2) The V interface may consist of interface(s) to one or more swiching systems.
- (3) Implementation of the V and Tsm interfaces is optional when interfacing elements are integrated into a common element.
- (4) The splitter function may be integrated into the ATU.
- (5) A digital carrier facility (e.g., SONET extension) may be interposed at the V interface when the ATU-C is located at a remote site.
- (6) The nature of the CI distribution (e.g., bus or star, type of media) is for further study.
- (7) More than one type of Tsm interface may be defined, and more than one type of Tsm interface may be provided from an ATU-R.
- (8) Due to the asymmetry of the signals on the line, the transmitted signals shall be distinctly specified at the U-R an U-C reference points.

ADSL:	Asymmetric digital subscriber line
AEX:	Byte inserted in the transmitted ADSL frame structure to provide synchronisation capacity that is shared among ASX channels
ASO - 3:	Downstream simplex sub-channel designators
ATU-C:	ADSL transceiver unit, central office end
ATU-R:	ADSL transceiver unit, remote terminal end
BF:	The number of bytes in a data stream allocated to the fast (i.e., non-interleaved) buffer
BI:	The number of bytes in a data stream allocated to the interleaved buffer
CI:	Customer installation
crc-8f:	Cyclic redundancy check using CRC-8 code - fast data
DAC:	Digital to analog converter
FEC:	Forward error correction
ibO - 23:	Indicator Bit(s)
IDTF:	Inverse discrete Fourier transform
LEX:	Byte inserted in the transmitted ADSL frame structure to provide synchronization capacity that is shared among LSX and ASX channels
LSO - 2:	Duplex sub-channel designators
Nm,f:	Number of bytes in a fast mux data frame
Nm,i:	Number of bytes in an interleaved mux data frame
POTS:	Plain old telephone service
PSTN:	Public switched telephone network
SM:	Service module
Tsm:	Interface(s) between ATU-R and SM(s)
U -C:	Loop interface - central office end
U - R:	Loop interface - remote terminal end