The MPEG2, DVB and ATSC system at a glance - ATSC abbreviations

ATSC
Advanced Television Systems Committee
American standardization group for digital terrestrial transmission

CAT
Conditional Access Table (PID=0x01):
Reference to scrambled programs, Table ID 0x01

CETT
Channel Extended Text Table

CNR
Carrier to Noise Ratio Indicates how far the noise level is down on carrier level

Constellation Diagram
Way of representing the I and Q components for *QAM* or *QPSK* modulation. The position of the points in the constellation diagram provides information about distortions in the *QAM* or *QPSK* modulator as well as about distortions after the transmission of digitally coded signals.

CVCT
Cable Virtual Channel Table (PID=0x1FFB)
Table ID 0xC9

DTS
Decoding Time Stamp

EIT
Event Information Table
Table ID 0xCB

EPG
Electronic Program Guide

ETT
Extended Text Table
Table ID 0xCC

ETM
Extended Text Message

FEC
Forward Error Correction
Error control bits added to useful data in the *QAM/QPSK* modulator for DVB-C, -S and DVB-T.

MGT
Master Guide Table(PID=0x1FFB)
Table ID 0xC7

MPEG
Motion Picture Experts Group

PAT
Program Association Table (PID=0x00)
List of all the programs contained in TS Multiplex with reference to PID of PMT
Table ID 0x00

PCR
Program Clock Reference

PES
Packetized Elementary Stream

PID
Packet Identifier

PIT
Program Identification Table
Table ID 0xD0

PMT
TS Program Map Table
Reference to packets with PCR
Name of programs, copyright, reference of the data streams with PIDs etc. belonging to the relevant program
Table ID 0x02

PSI
Program Specific Information

PSIP
Program and System Information Protocol

PT
Private Table

PTC
Physical Transmission Channel

PTS
Presentation Time Stamp

QAM
Quadrature Amplitude Mode
Type of modulation for digital signals *(DVB-C and -T)*. Two signal components I and Q are each quantized and modulated onto two orthogonal carriers as appropriate for the *QAM* level (4, 16, 32, 64, 128, 256). The *constellation diagram* is obtained by plotting the signal components with I and Q as the coordinate axes. Therefore, 2, 4, 5, 6, 7 or 8 bits of a data stream are transmitted with one symbol, depending on the *QAM* level (4, 16, 32, 64, 128, 256). This type of modulation is used in cable systems and for coding the *COFDM* single carriers.

QEF
Quasi Error Free
Less than one uncorrected error per hour at the input of the *MPEG2* decoder.
(BER <= 10^{-11})

RRT
Rating Region Table(PID=0x1FFB)
Table ID 0xCA

RS Protection Code
RS(204,188,8)(RS = Reed Salomon)
16-byte long error control code added to every transport packet consisting of 187 (scrambled) bytes +1 syncbyte with the following result: The packet has a length of 204 bytes and the decoder can correct up to T = 8 errored bytes. This code ensures a residual Bit Error Ratio BER of approx. $1x10^{-11}$ at an input error ratio of $2x10^{-4}$.

ST
Stuffing Table

STT
System Time Table (PID=0x1FFB)
Table ID 0xCD

TS
Transport Stream

TVCT
Terrestrial Virtual Channel Table (PID=0x1FFB)
Table ID 0xC8

n VSB Modulation
Vestigial Side Band Modulation
Transmission of n discrete amplitude values using the vestigial sideband method on normal terrestrial *(ATSC)* channels and conventional IF modulators. The most common variant is 8 VSB transmission. With 8 VSB, 3 bits ($2^3 = 8$) of the data stream are transmitted per amplitude value.

8 VSB
Vestigial Side Band Modulation
Digital terrestrial broadcast mode used in ATSC standard.

16 VSB
Vestigial Side Band Modulation
High Data Rate mode especially for cable networks.