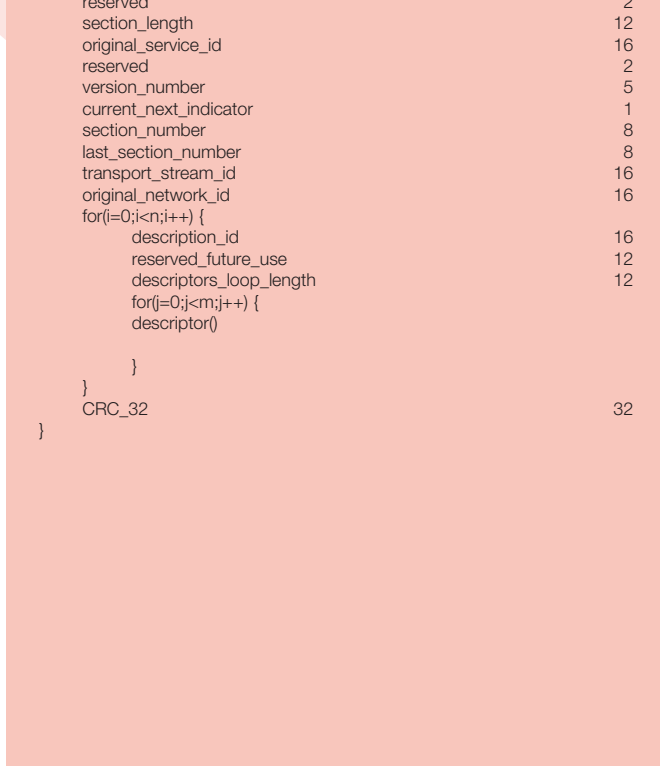
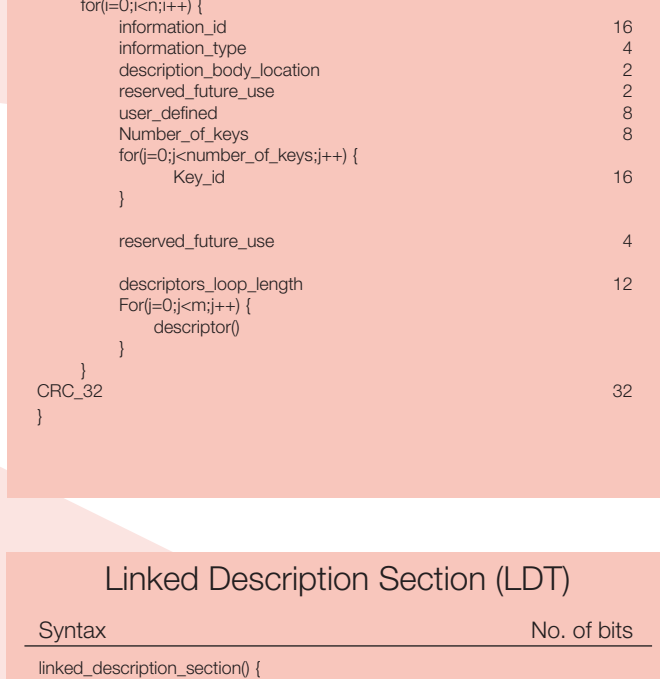
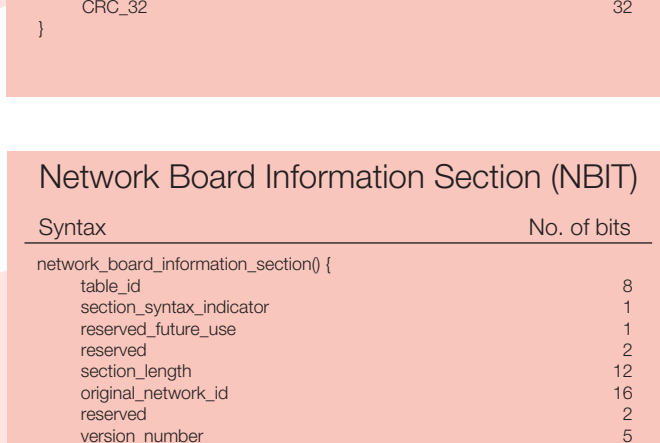
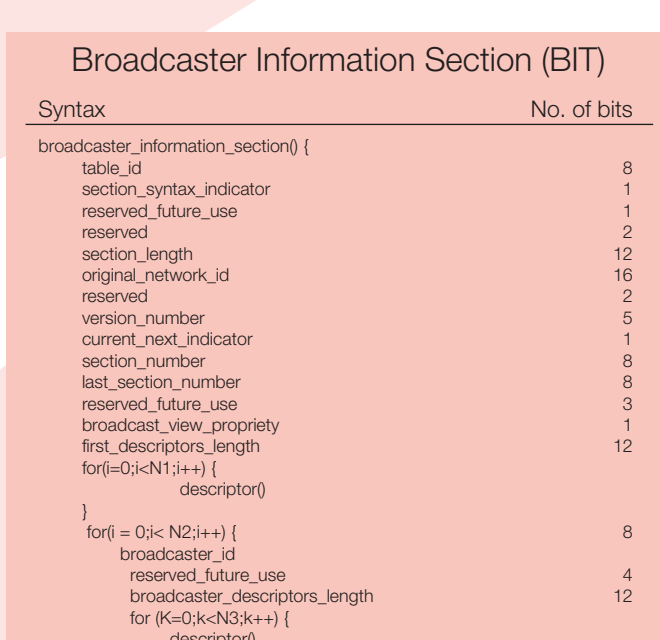
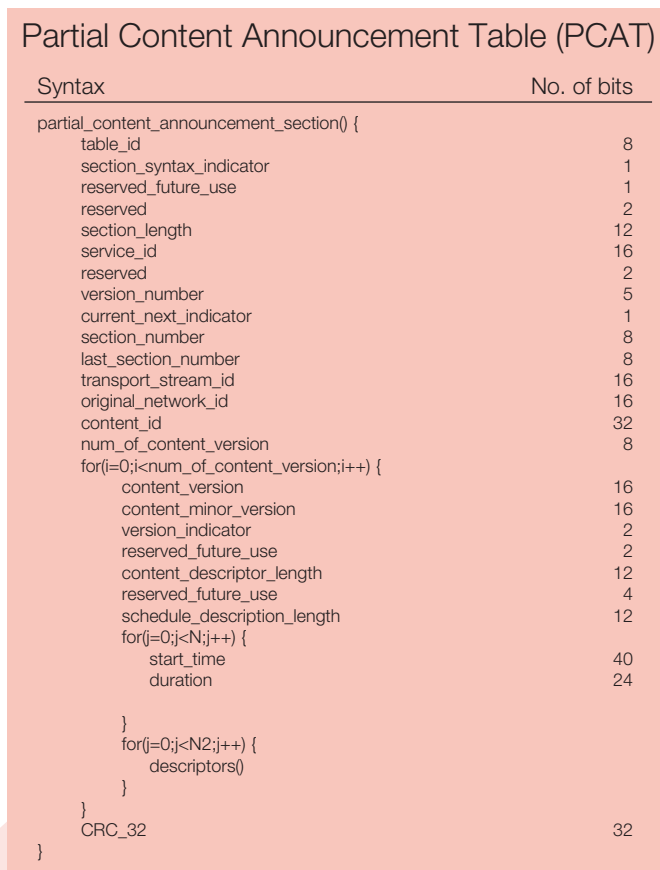
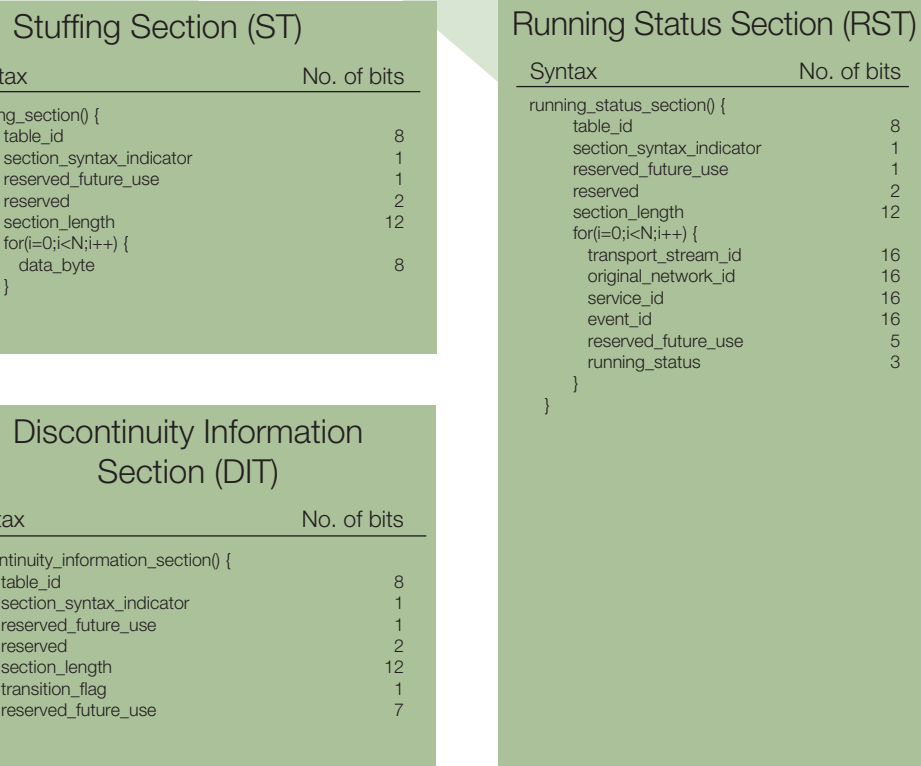
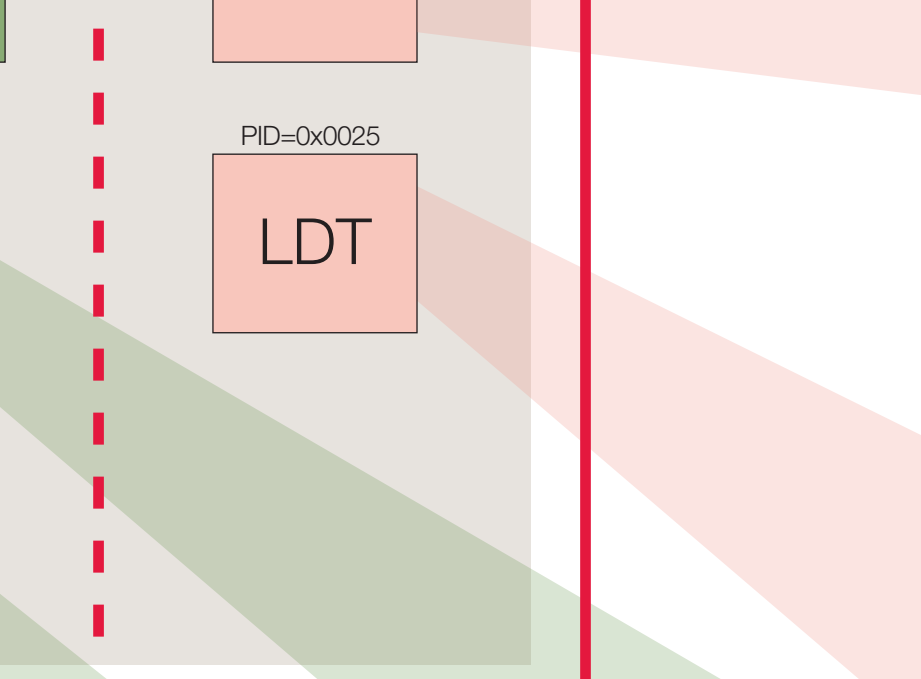
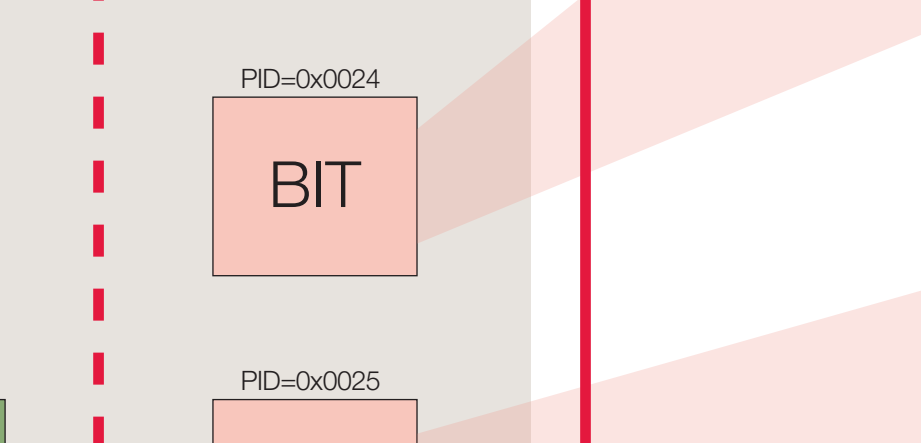
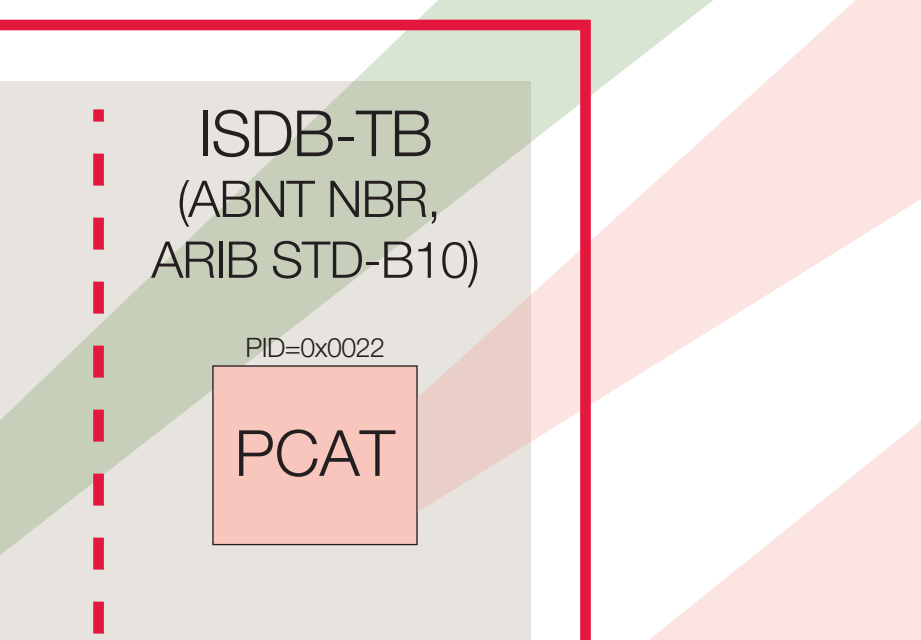
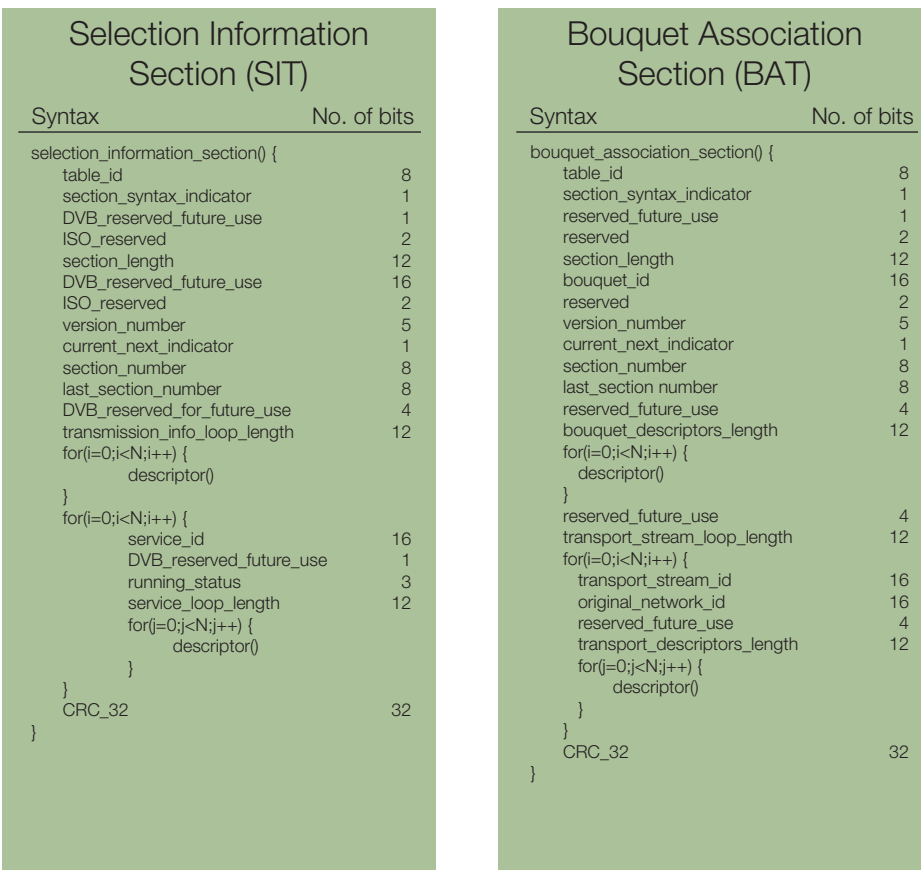
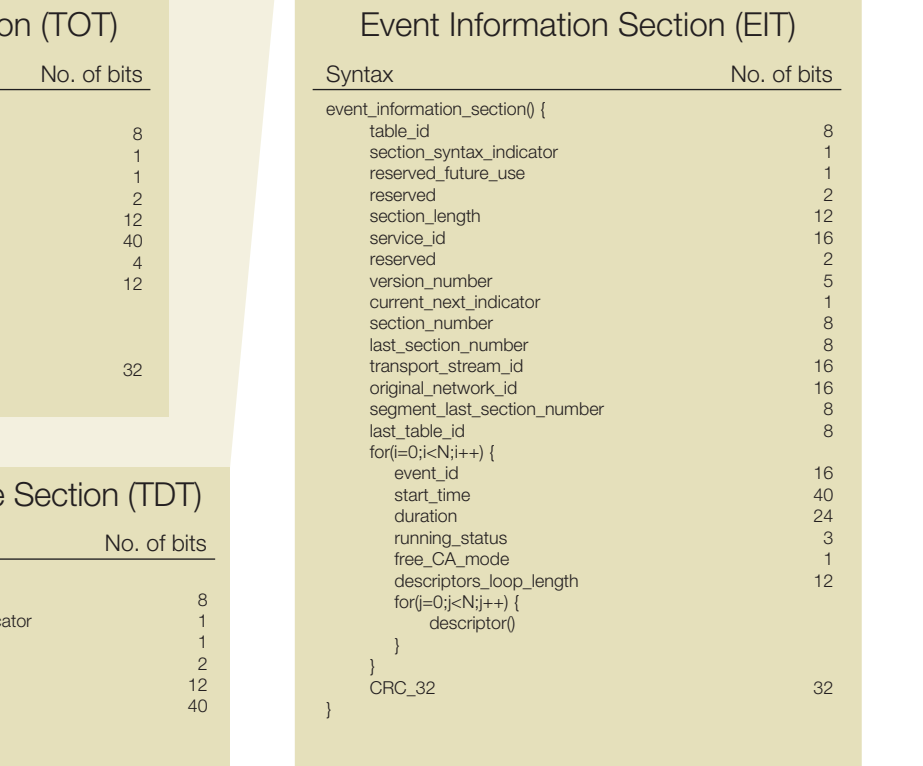
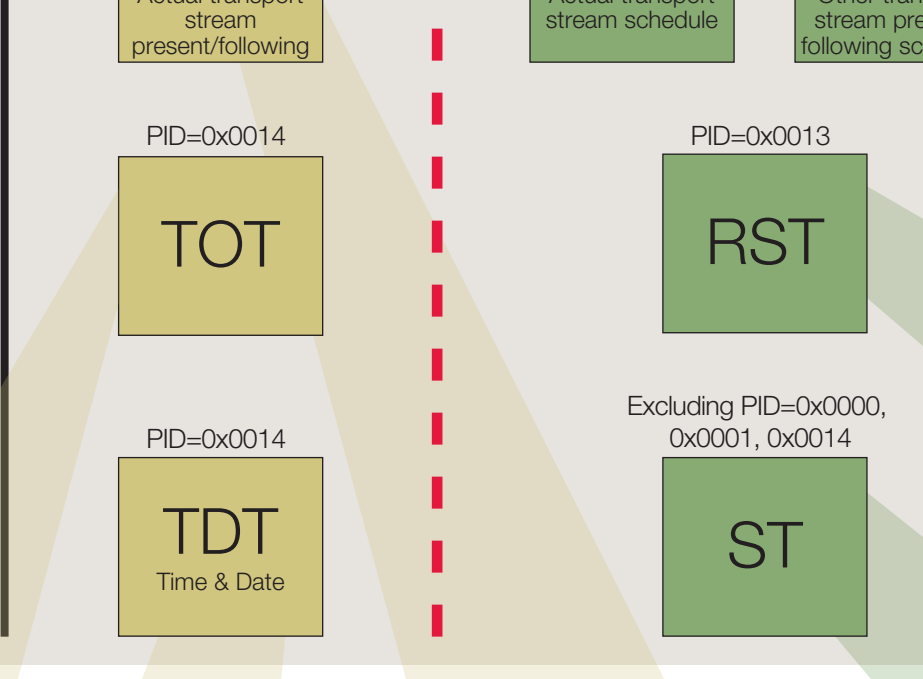
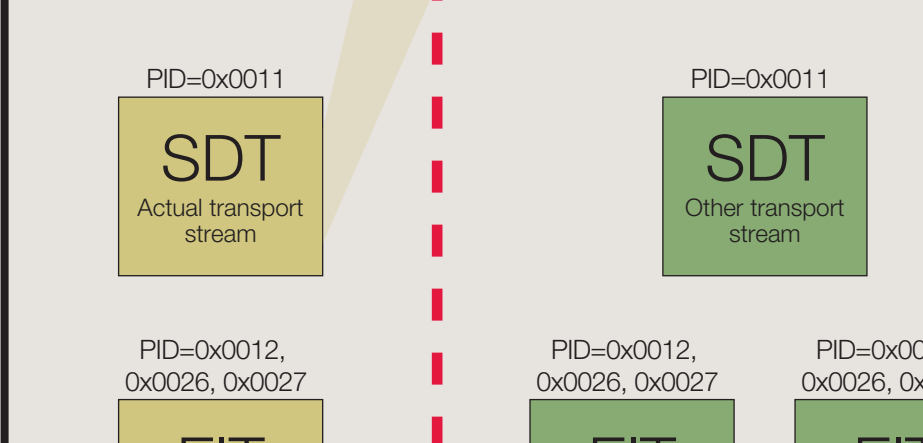
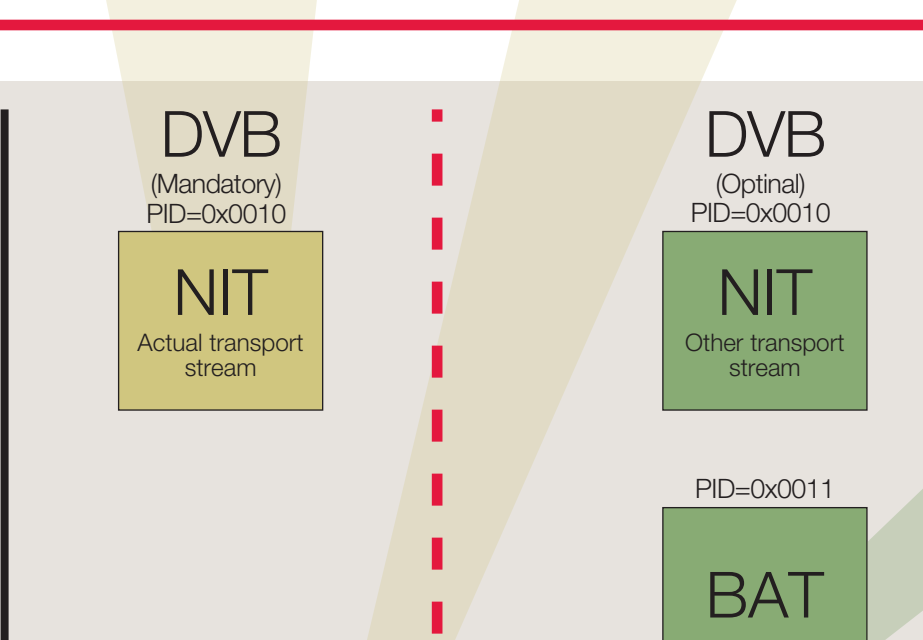
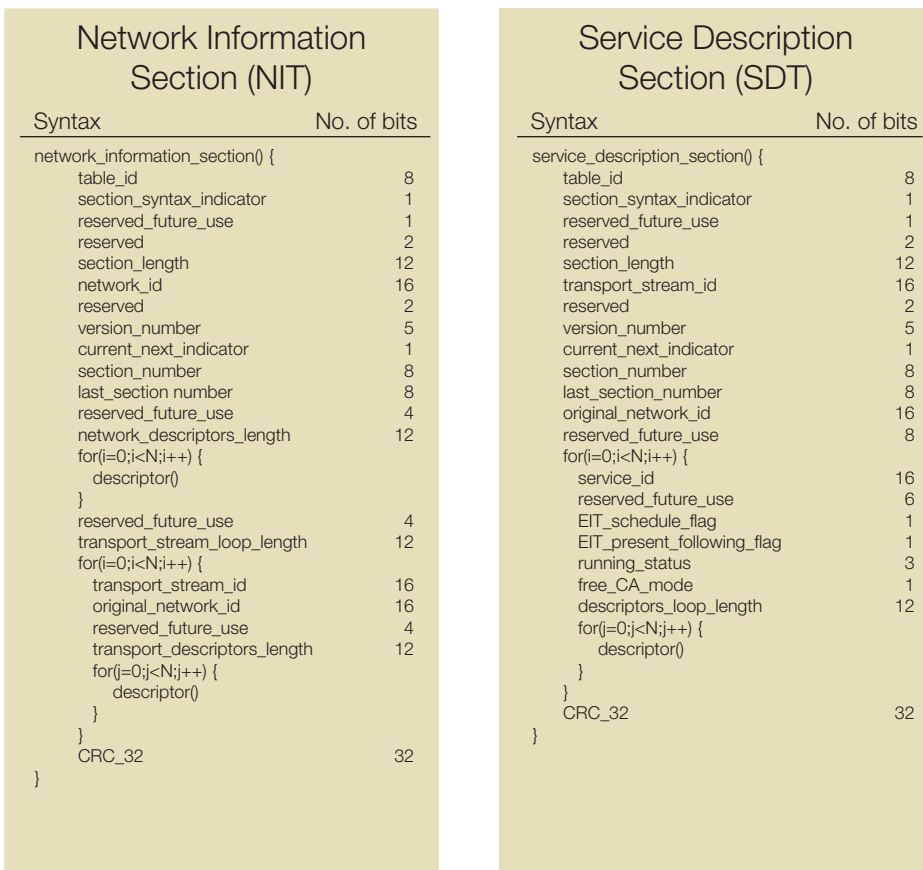
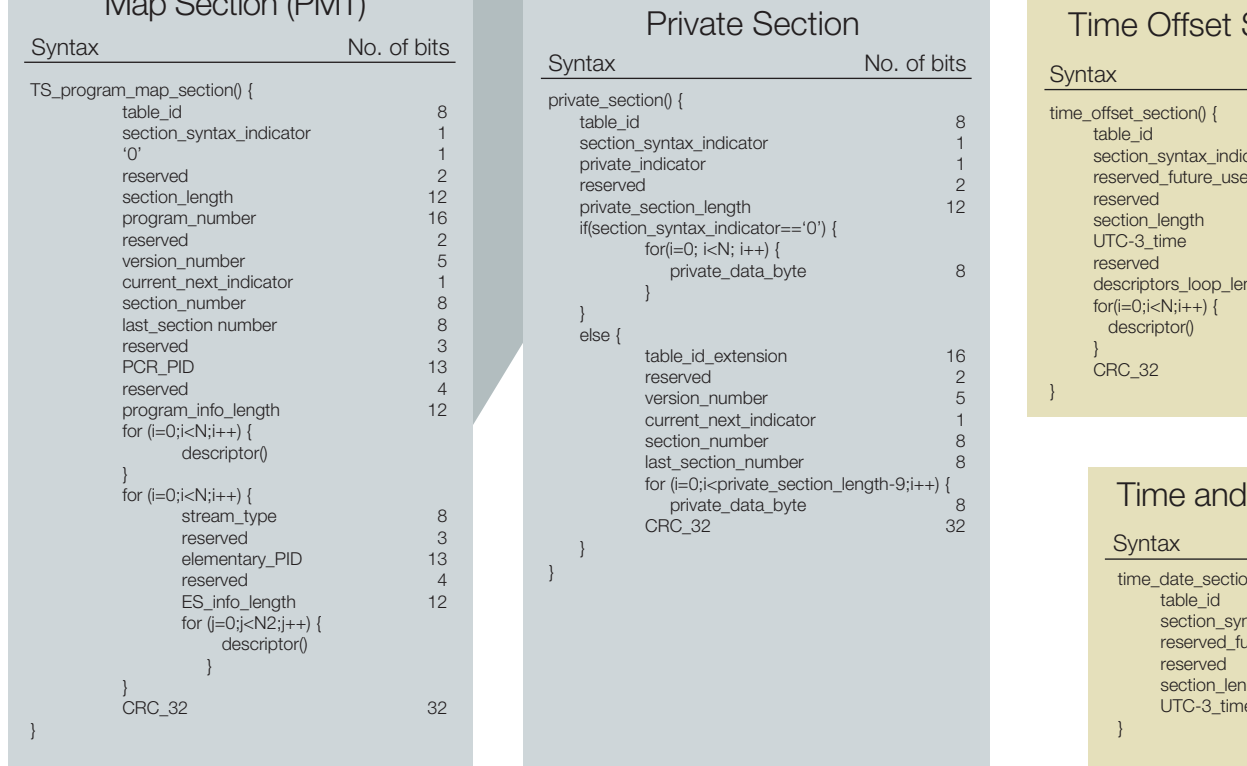
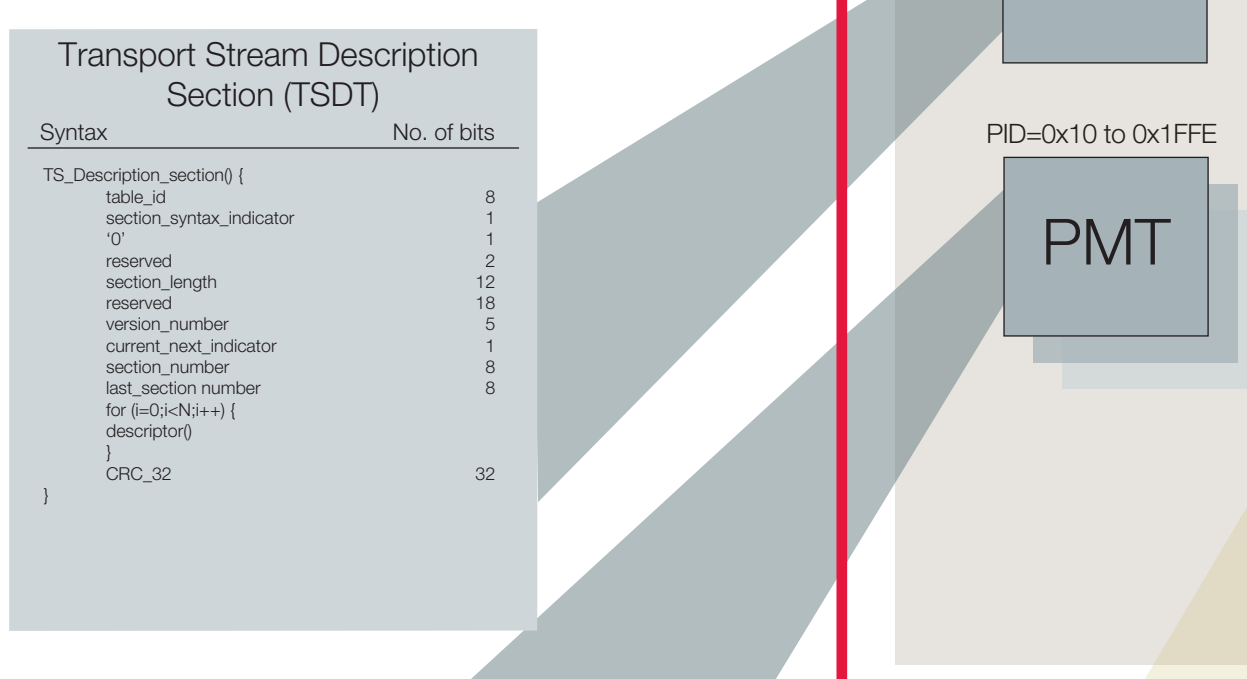
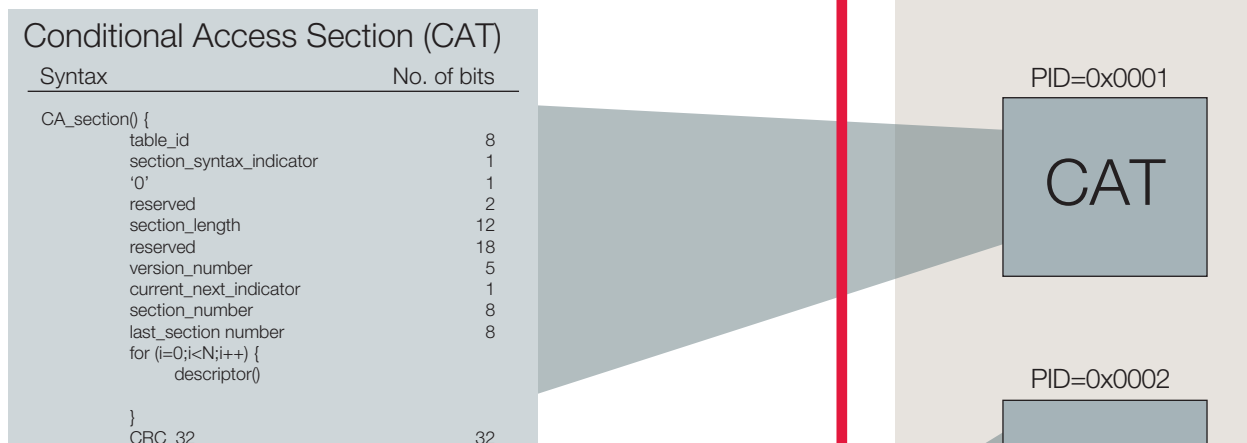
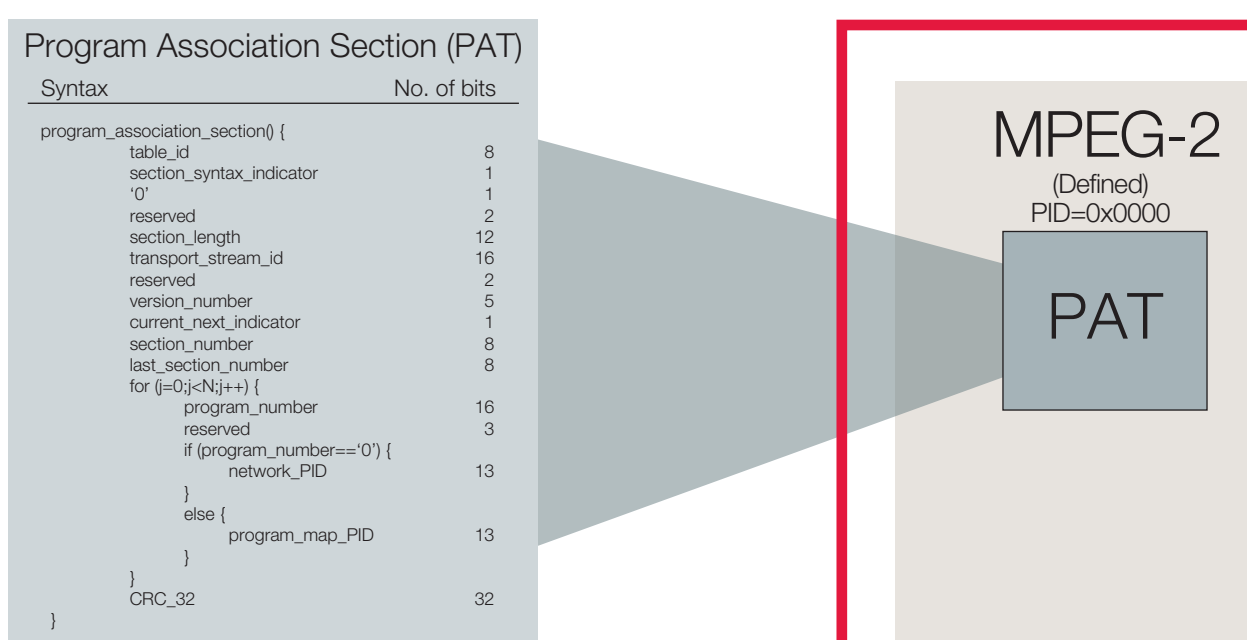
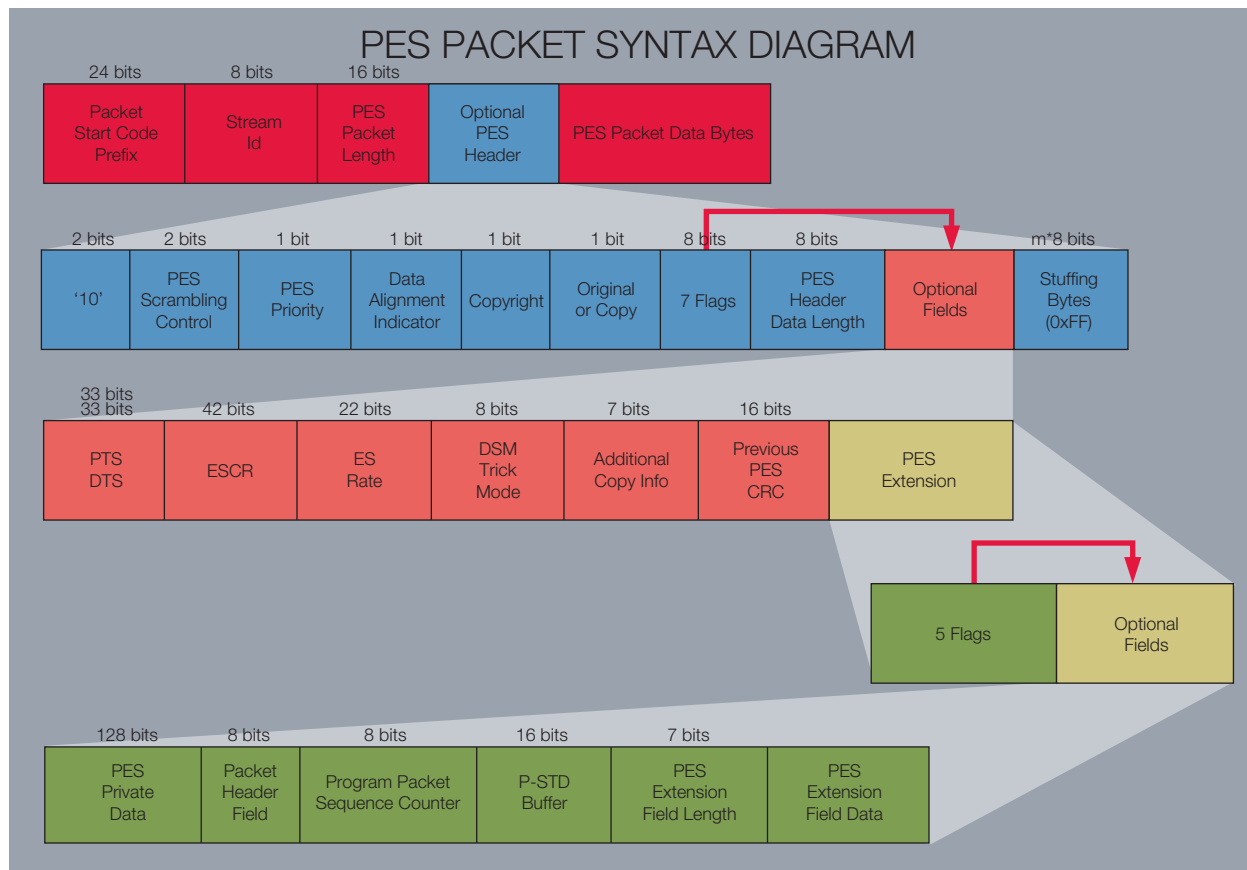
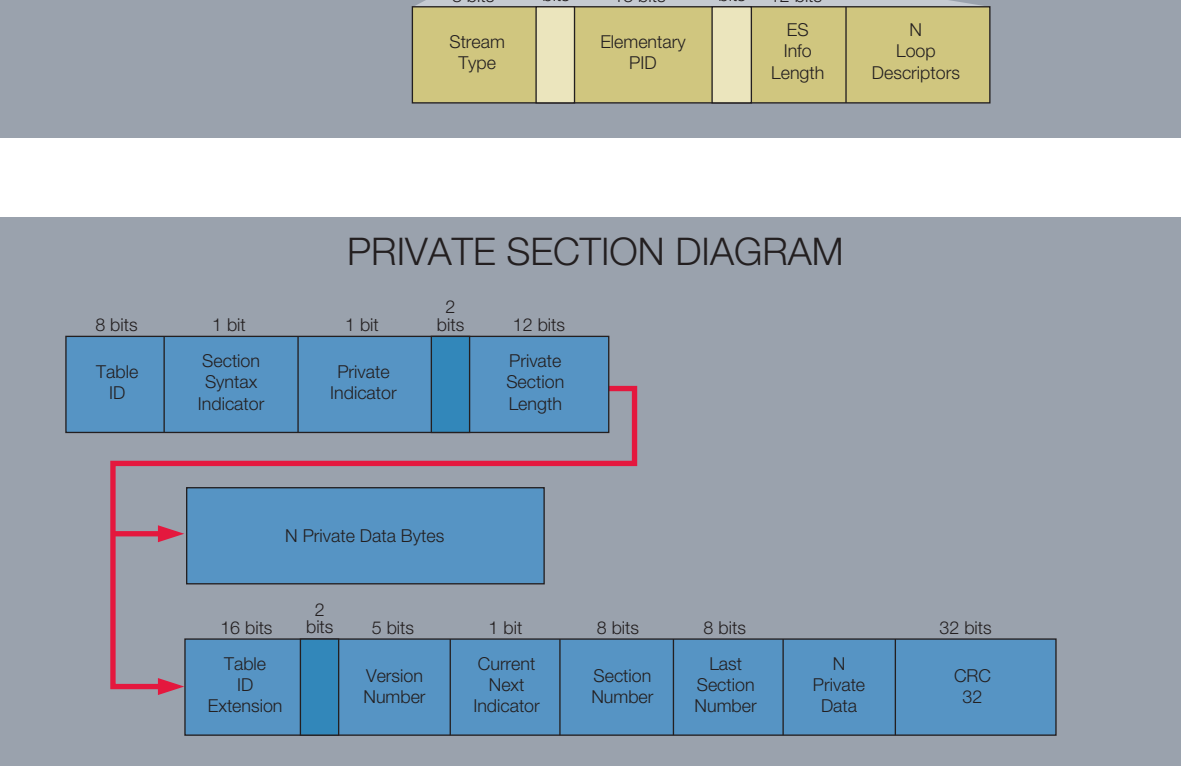
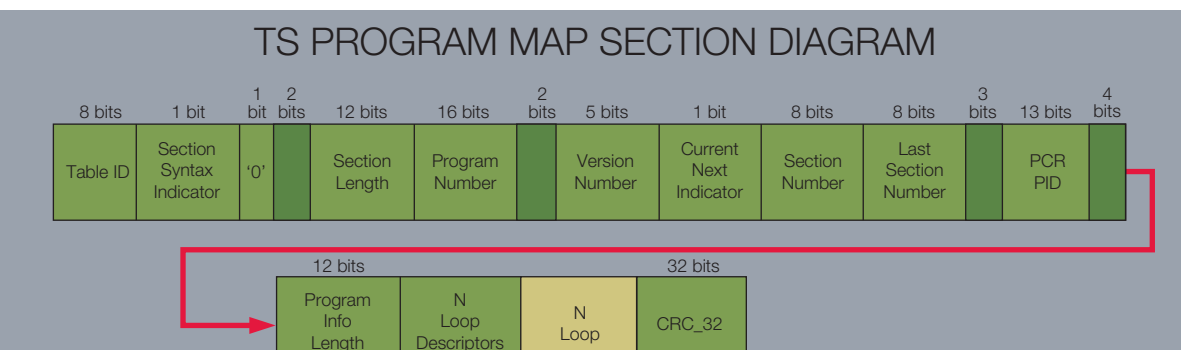
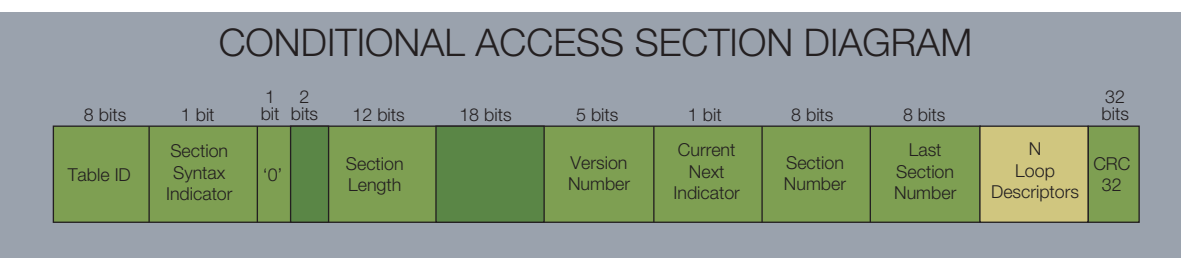
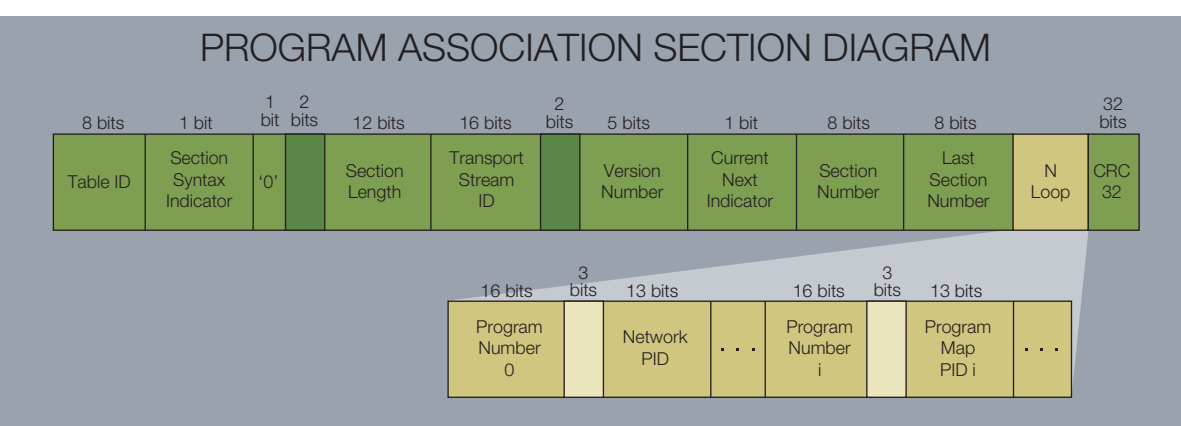
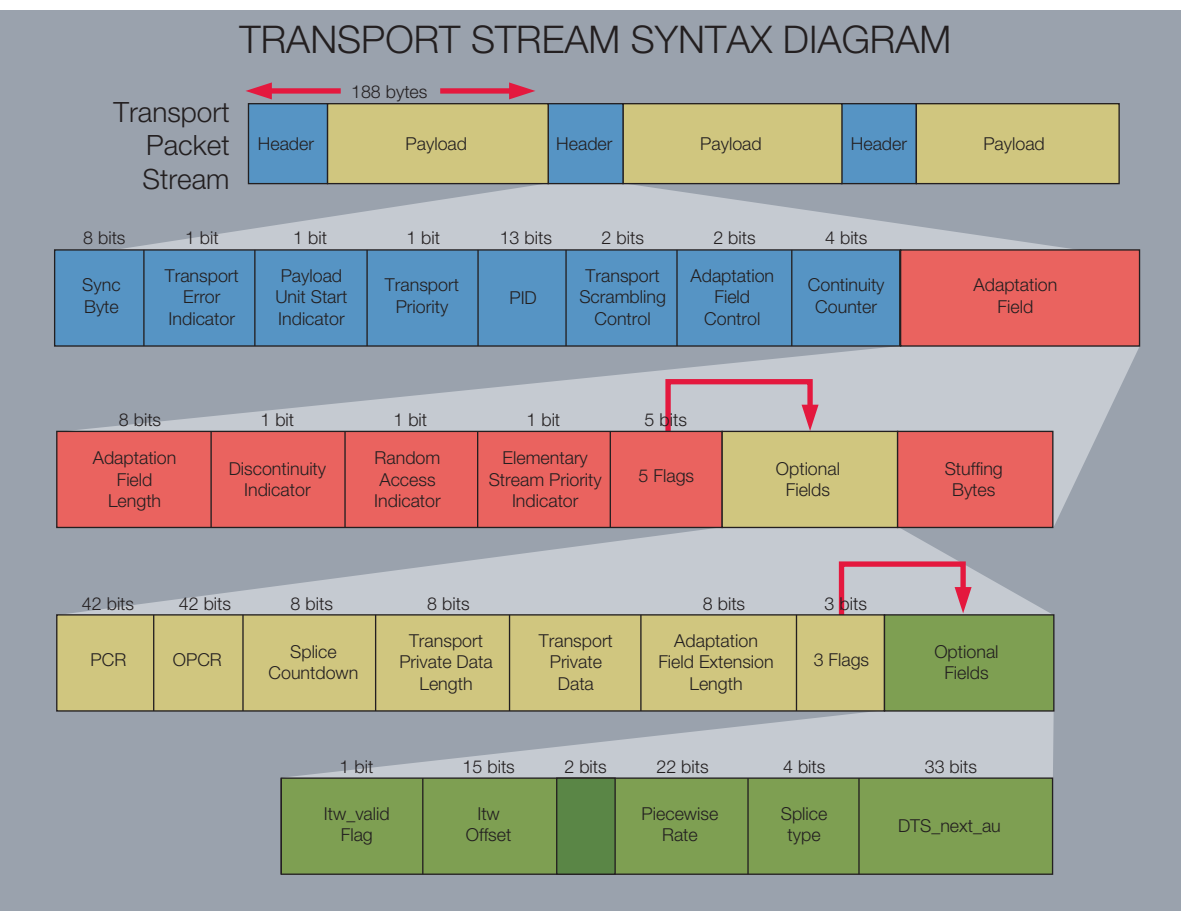
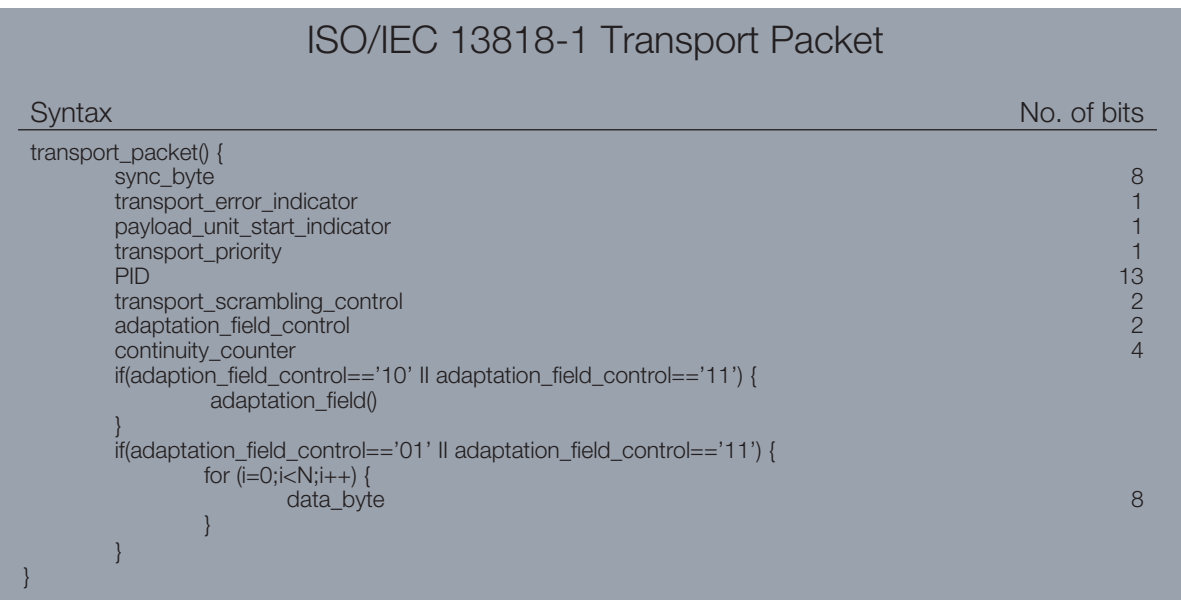




Testing Digital Television Standards: ISDB-TB

Includes DVB, ARIB and ISDB-TB ABNT NBR
service information tables



Allocation of PID

Table	PID
PAT	0x0000
PMT	Indirect designation by PAT
CAT	0x0001
NIT	0x0010
SDT	0x0011
BAT	0x0011
EIT (terrestrial digital television broadcasting)	0x0012, 0x0026, 0x0027
RST	0x0013
TDT	0x0014
TOT	0x0014
PCAT	0x0022
BIT	0x0024
NBIT	0x0025
LDT	0x0025
ST	Exclude 0x0000, 0x0001, 0x0014
NIT packet	0xFFFF

Allocation of table_id Values and Transmission Level

Table_id	Table	Transmission level	Transmission frequency
0x00	PAT ¹	Mandatory	Once or more/100m sec.
0x01	CAT ¹	Mandatory	Once or more/1 sec.
0x02	PMT	Mandatory	Once or more/100m sec.
0x03	NIT (Actual network) ¹	Mandatory	Once or more/10 sec.
0x04	SDT (Actual stream) ¹	Mandatory	Once or more/10 sec.
0x05	SDT (Other stream)	Optional	Once or more/10 sec.
0x06	BAT	Optional	Once or more/10 sec.
0x0E	EIT (Present and following program of the actual stream)	Optional	Once or more/10 sec.
0x0F	EIT (Program after 8 days of the actual stream)	Optional	Once or more/10 sec.
0x10	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x11	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x12	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x13	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x14	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x15	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x16	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x17	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x18	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x19	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x1A	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x1B	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x1C	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x1D	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x1E	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x1F	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x20	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x21	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x22	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x23	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x24	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x25	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x26	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x27	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x28	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x29	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x2A	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x2B	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x2C	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x2D	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x2E	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x2F	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x30	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x31	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.
0x32	EIT (Program after 8 days of the other stream)	Optional	Once or more/10 sec.

Stream_type

Value	Description
0x00	Reserved
0x01	Video in accordance with ISO/IEC 11172-2 video
0x02	Video in accordance with ITU-T Recommendation H.262
0x03	Audio in accordance with ISO/IEC 11172-3
0x04	Audio in accordance with ISO/IEC 13818-3
0x05	Section
0x06	PES packet
0x07	MPEG in accordance with ISO/IEC 13818-1
0x08	In accordance with ITU-T Recommendation H.222.0 Annex DSM-CC
0x09	In accordance with ITU-T Recommendation H.222.1
0x0A	Type A in accordance with ISO/IEC 13818-6
0x0B	Type B in accordance with ISO/IEC 13818-6
0x0C	Type C in accordance with ISO/IEC 13818-6
0x0D	Type D in accordance with ISO/IEC 13818-6
0x0E	Availability data in accordance with ITU-T Recommendation H.222.0
0x0F	Audio with ADTS transport syntax in accordance with ISO/IEC 13818-7
0x10	Video in accordance with ISO/IEC 14496-2
0x11	Audio in accordance with ISO/IEC 14496-3
0x12	SL - packets stream or FlexMux stream transported in the PES packets in accordance with ISO/IEC 14496-1
0x13	SL - packets stream or FlexMux stream transported in the sections in accordance with ISO/IEC 14496-1
0x14	Download sync protocol in accordance with ISO/IEC 13818-6
0x15	Metadata transported by a PES packet
0x16	Metadata transported by a metadata_section
0x17	Metadata transported by data carousel in accordance with ISO/IEC 13818-6
0x18	Metadata transported by the objects carousel in accordance with ISO/IEC 13818-6
0x19	Metadata transported by a synchronized download protocol in accordance with ISO/IEC 13818-6
0x1A	IPMP stream in accordance with ISO/IEC 13818-11
0x1B	Video in accordance with ITU-T Recommendation H.264 and ISO/IEC 14496-10
0x1C	Reserved
0x1D	Reserved
0x1E	Data pipe
0x1F	IPMP stream
0x20-0xFF	Private use

H.264 Video (a few examples)

Profiles	Baseline	Main	High	Video resolution @ frame rate
Levels				
1.3	768 kbit/s	768 kbit/s	960 kbit/s	320x240@30
3	10 Mbit/s	10 Mbit/s	12.5 Mbit/s	720x480@30
4.1	50 Mbit/s	50 Mbit/s	62.5 Mbit/s	1280x720@60 1920x1080@30

Fale com a Tektronix sobre soluções de testes e monitoração MPEG para design de infra-estruturas, avaliação e monitoração de redes. A seção ISDB-TB foi desenvolvida em colaboração com o Inatel.

Tektronix - Resolvendo os desafios atuais de entrega e qualidade do vídeo digital.

To find out all our latest MPEG and Next Generation Compression Test & Measurement Solutions, and to download primers and application notes, visit:

<http://www.tek.com/MPEG>

Our customers demand the ability to quickly embrace new technologies and positively impact workflow efficiency.

At Tektronix, our goal is to stay ahead of the technology curve and ensure delivery of test & measurement solutions to our customers when they need them.

While our technology leads the industry, it is our deep understanding of our customers' business and their support and training needs that sets us apart and enables our customers to realize business advantages in the digital video/audio world.

Tektronix solutions will enable you to effectively integrate new technologies, improve workflow efficiency and achieve business excellence.

**For our customers and for Tektronix:
Innovation never rests**

Contact Tektronix:

ASEAN / Australasia (65) 6356 3900
Austria +41 52 675 3777
Balkans, Israel, South Africa and other ISE Countries +41 52 675 3777
Belgium 07 81 60166
Brazil +55 (11) 3759 7600
Canada 1 (800) 661-5625
Central East Europe, Ukraine and the Baltics +41 52 675 3777
Central Europe & Greece +41 52 675 3777
Denmark +45 80 88 1401
Finland +41 52 675 3777
France +33 (0) 1 69 86 81 81
Germany +49 (221) 94 77 400
Hong Kong (852) 2585-6688
India (91) 80-22275577
Italy +39 (02) 25086 1
Japan 81 (3) 6714-3010
Luxembourg +44 (0) 1344 392400
Mexico, Central, South America and Caribbean 52 (55) 54247900
Middle East, Asia and North Africa +41 52 675 3777
The Netherlands 090 02 021797
Norway 800 16098
People's Republic of China 86 (10) 6235 1230
Poland +41 52 675 3777
Portugal 80 08 12370
Republic of Korea 82 (2) 6917-5000
Russia & CIS +7 (495) 7484900
South Africa +27 11 206 8360
Spain (+34) 901 988 054
Sweden 020 08 80371
Switzerland +41 52 675 3777
Taiwan 886 (2) 2722-9622
United Kingdom & Eire +44 (0) 1344 392400
USA 1 (800) 426-2200
For other areas contact Tektronix, Inc. at: 1 (503) 627-7111

For Further Information

Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology. Please visit www.tektronix.com



Copyright © 2008, Tektronix. All rights reserved. Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specification and price change privileges reserved. TEKTRONIX and TEK are registered trademarks of Tektronix, Inc. All other trade names referenced are the service marks, trademarks or registered trademarks of their respective companies.
12/08 EA/PP 25W-22988-0

Tektronix®

