

**1. DVB (Digital Video Broadcasting):**

represents digital radio system for multimedia content delivery

**X is a collection of open standards maintained by DVB Project consortium which vocer digital television broadcasting**

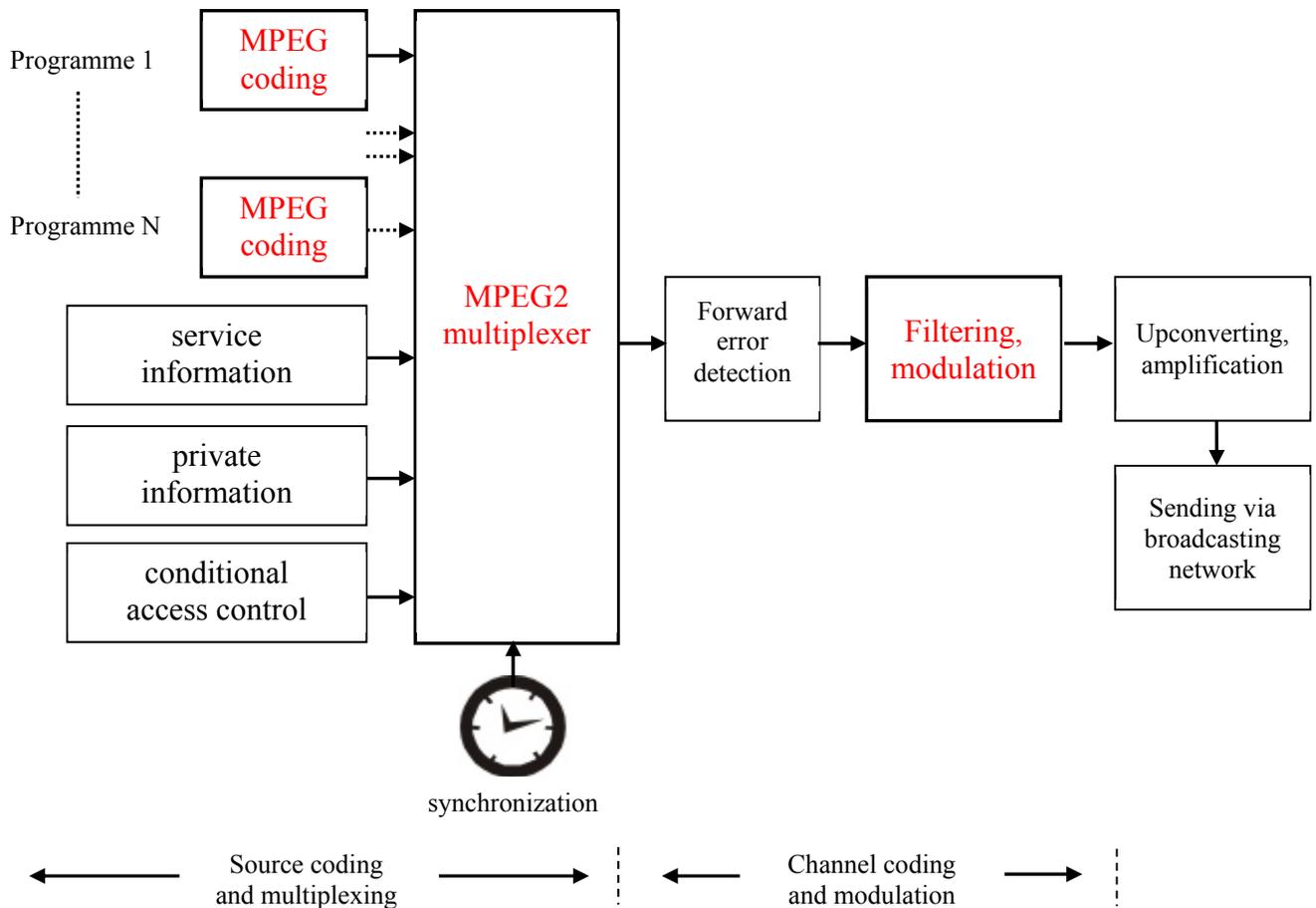
for audio coding Dolby DIGITAL AC-3 is used

depending on transmission media it uses PSK modulation

**2. In general, MPEG-2 systems layer performs:**

- a) **multiplexing**
- b) **packetization**
- c) **timing and synchronization**
- d) **conditional access**

**3. Fill in empty (red) components of block diagram for DVB transmitter!**



**4. DVB standards include TV broadcasting via:**

1. cable **(DVB-C, DVB-C2)**
2. satellite **(DVB-S, DVB-S2, DVB-S2X, DVB-SH)**
3. terrestrial transmissions **(DVB-T, DVB-T2, DVB-H)**
4. return channel **(DVB-RCS/RCT/RCC)**
5. microwave broadcasting **(DVB-MC/MS)**
6. transmission of data services with high bit rate **(DVB-Data)**

**(DVB-C, DVB-C2), (DVB-MC/MS), (DVB-S, DVB-S2, DVB-S2X, DVB-SH),  
(DVB-Data), (DVB-T, DVB-T2, DVB-H), (DVB-RCS/RCT/RCC)**

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**5. DVB-T/T2 services are aired terrestrially within the ultra-high frequency (UHF) band covering frequencies in a range from:**

30 MHz to 30 GHz

**X 300 MHz to 3 GHz**

3 MHz to 30 GHz

3 MHz to 3 GHz

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**6. Currently, conventional geostationary satellite contains:**

from 2 to 3 transponders  
and one transponder have a bandwidth ranging from 20 to 50 MHz

from 3 to 10 transponders  
and one transponder have a bandwidth ranging from 50 to 100 MHz

from 200 to 300 transponders  
and one transponder have a bandwidth ranging from 26 to 72 MHz

**X about 20 to 30 transponders  
and one transponder have a bandwidth ranging from 26 to 72 MHz**

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**7. HbbTV – Hybrid broadcast broadband TV:**

HbbTV is a global initiative focused on the harmonization of broadcast and **broadband services** and on the proposal of technical specifications how to deliver these services and applications to end users through connected **TVs**, set-top boxes and multi-screen devices.

