1. DVB (Digital Video Broadcasting):

□ represents digital radio system for multimedia content delivery

**x** **is a collection of open standards manatained by DVB Project consorzium which vocer digital television broadcasting**

□ for audio coding Dolby DIGITAL AC-3 is used

□ depending on transmission media it uses PSK modulation

1. In general, MPEG-2 systems layer performs:
2. **multiplexing**
3. **packetization**
4. **timing and synchronization**
5. **conditional access**
6. Fill in empty (red) components of block diagram for DVB transmitter!

MPEG

coding

MPEG

coding

Programme 1

Programme N

MPEG2

multiplexer

service

information

private

information

conditional

access control

Forward

error

detection

Filtering,

modulation

Upconverting,

amplification

Sending via broadcasting network



synchronization

Source coding

and multiplexing

Channel coding

and modulation

1. 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. microvawe 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)**

1. 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

1. 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**

1. 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.