

DTT – A European Success Story

Peter Siebert

DVB Project Office

Our Mission: To Create And To Promote Video Standards



ATSC



DVB



ISDB-T

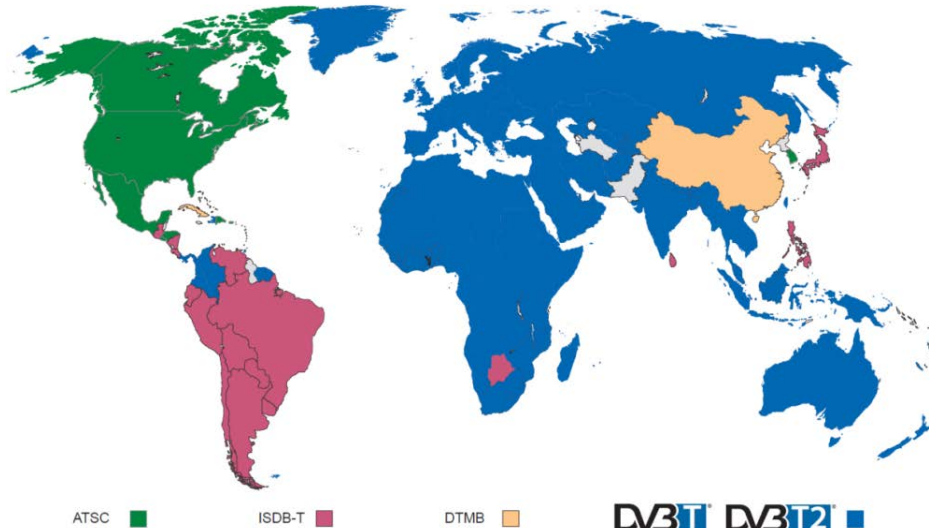


DTMB



DVB Standards Worldwide

- DVB-S/S2 is **the** standard for Direct-to-Home
- DVB-C is deployed widely
- DVB-T/T2 has been adopted by about 150 countries

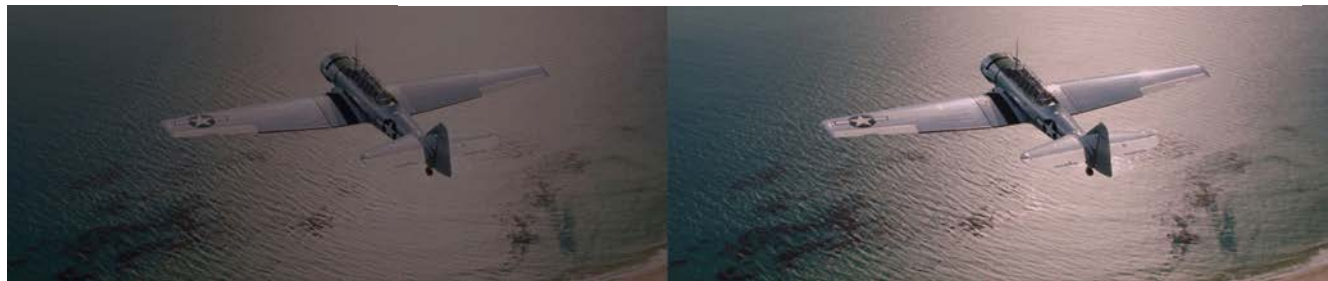
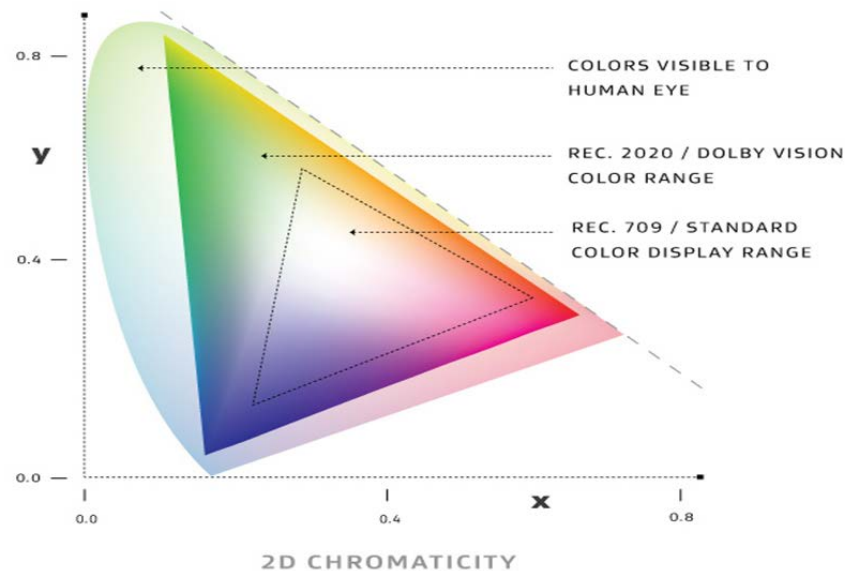


General Features of All DVB Specifications (Including DTT)

- Wide support of codecs (MPEG-2, H.264, HEVC, ...)
- Standardised Conditional Access with wide support from the industry
- HbbTV as interactive solution
- UHD (4K) resolution

New Features Coming Soon

- High Dynamic Range
 - HLG and HDR10
- Wider color
- Next Generation Audio
 - MPEG-H
 - Dolby AC-4



- DVB is currently analysing the potential of Virtual Reality for broadcast applications
- In the area of OTT we are working on multicast solutions
- Delivery of broadcast content to tablets and smartphones

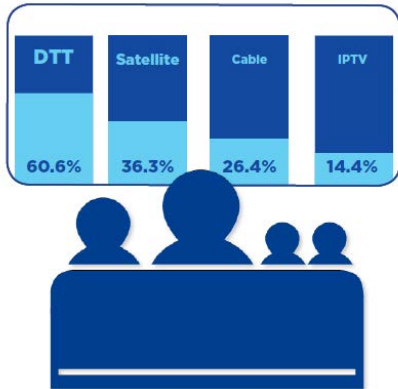
DVB-T2: An Excellent Solution For DTT

- Spectral performance close to Shannon Limit
- Fixed and **mobile** reception modes
- Single Frequency Networks for spectral reuse
- **Local** content distribution
- Very **easy** set up for the end user

DVB-T2: A European Success Story

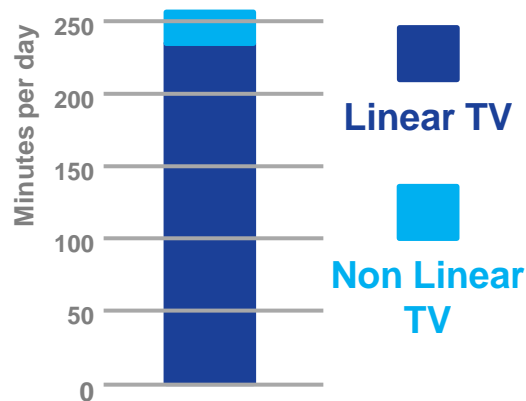
Dominant platform

118 million
households rely on
DTT



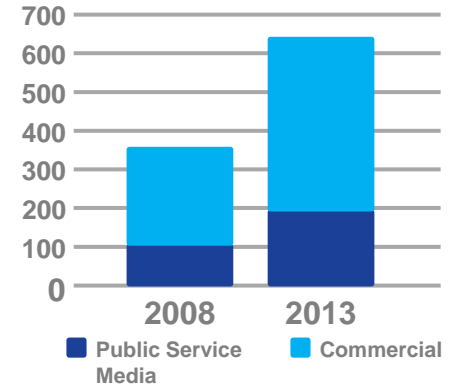
Linear TV is alive

3 hours of
watching
per day

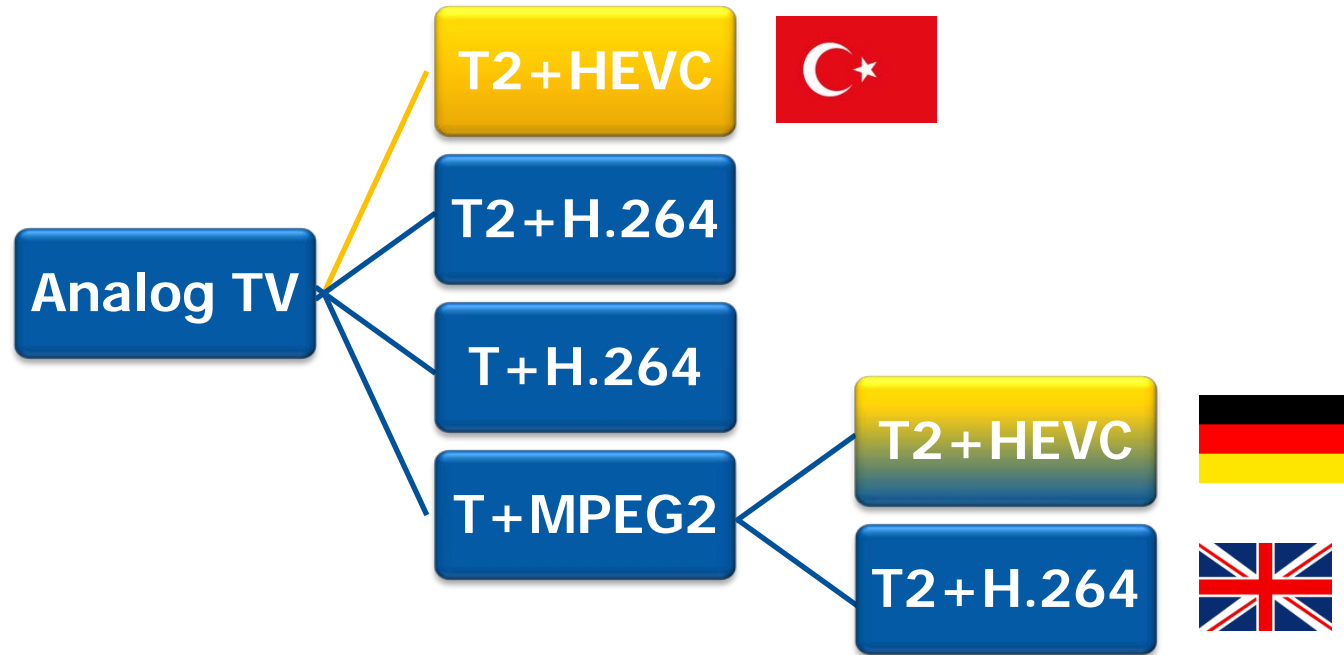


DTT is growing

80% growth in 5 years



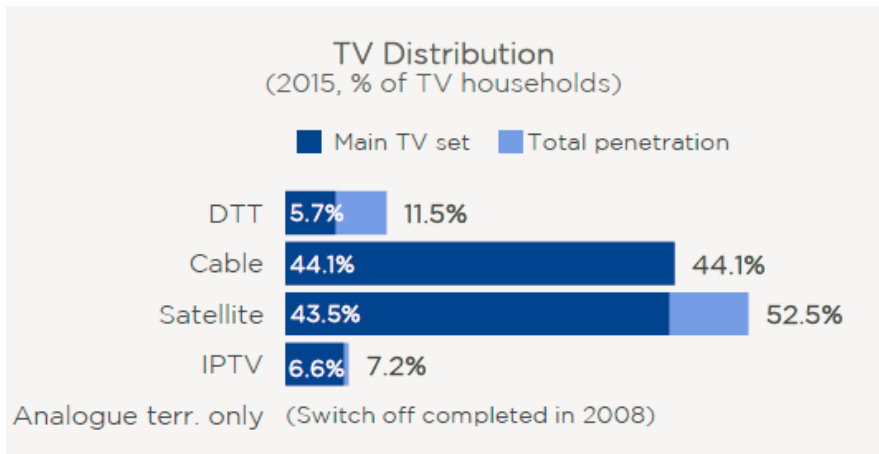
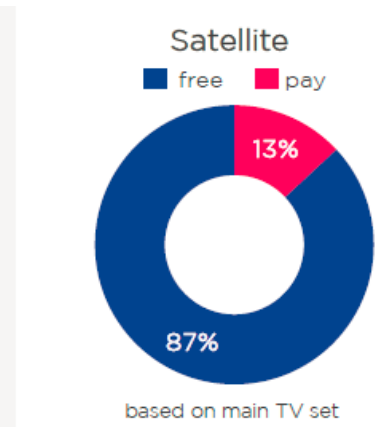
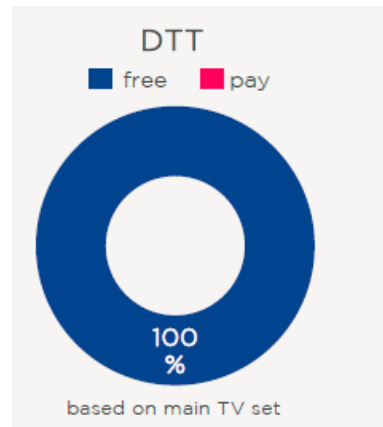
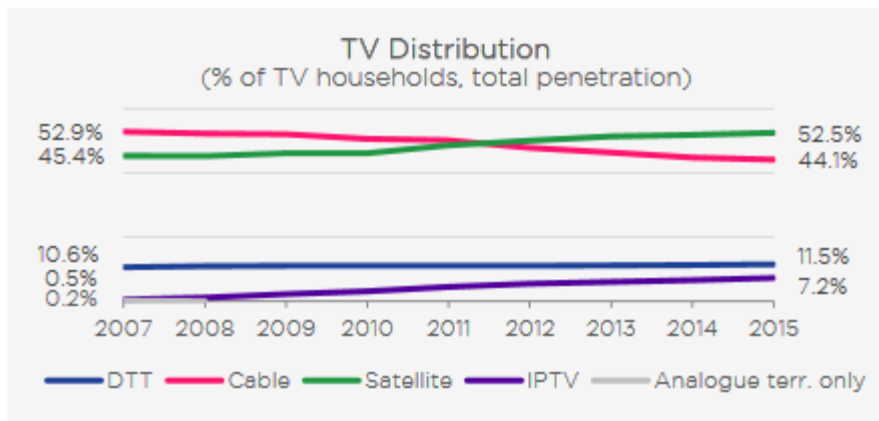
DTT Transition Scenarios



— Transition has already happened or is confirmed

— Potential transition in the future

DTV in Germany



Germany is introducing T2 with HEVC

1080p50 will deliver best quality

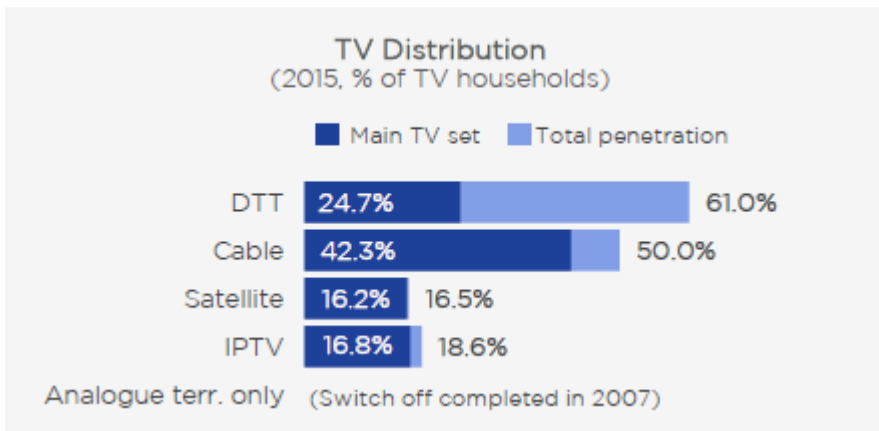
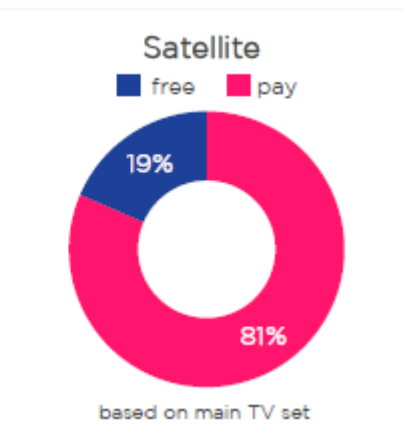
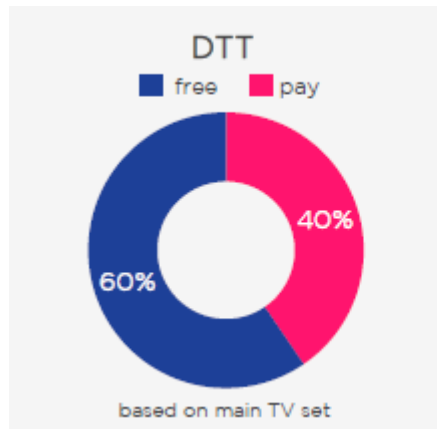
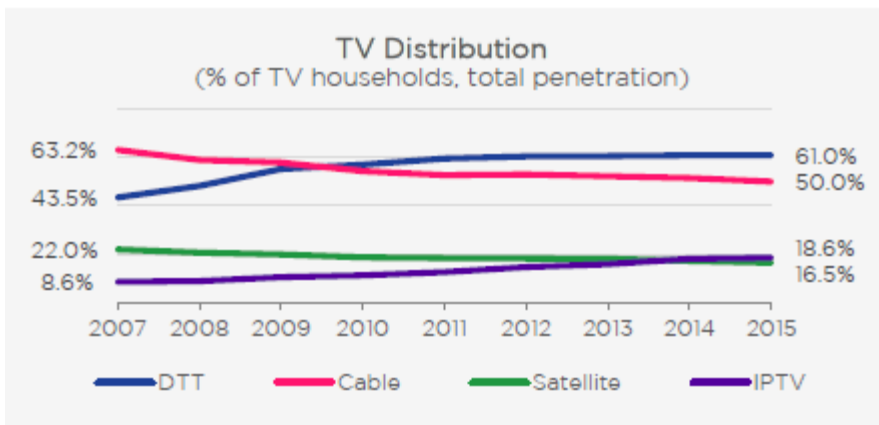
Portable reception

40 Free to air as well as pay TV services

Basic STBs below 40 Euros

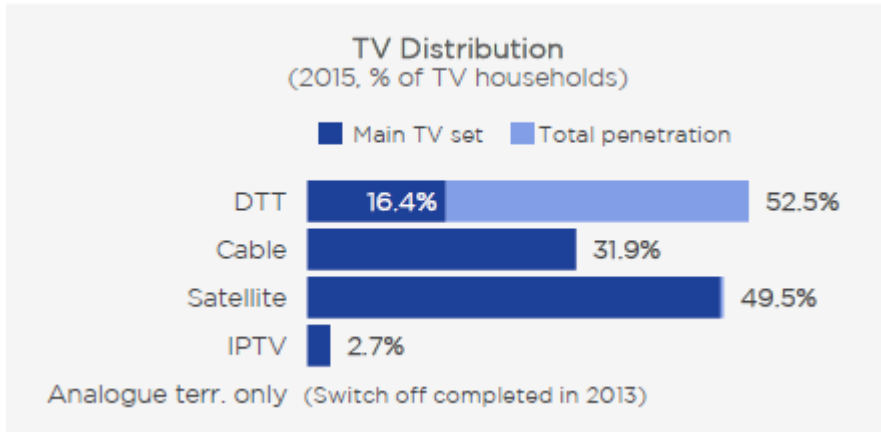
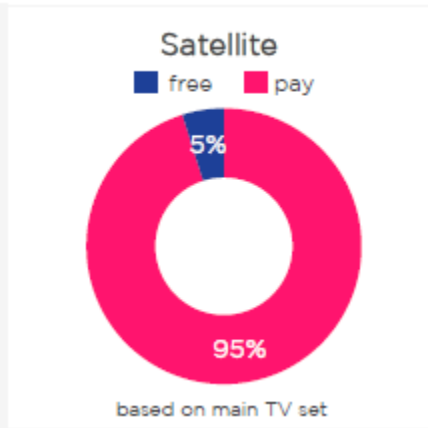
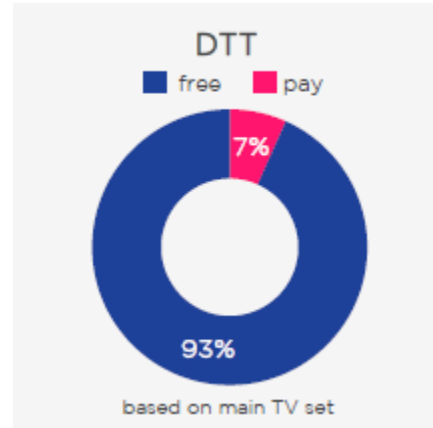
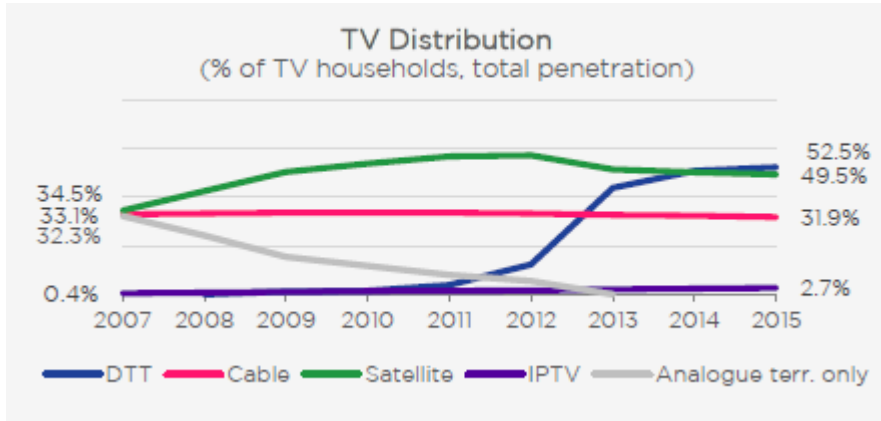


DTV in Sweden



Strong and successful DTT Pay TV
10 FTA Services, 48 Pay TV

DTV in Poland



GDP per capita is similar to Turkey
(10840 Eur vs 8488 Eur in Turkey)

66% of TV revenues are subscription

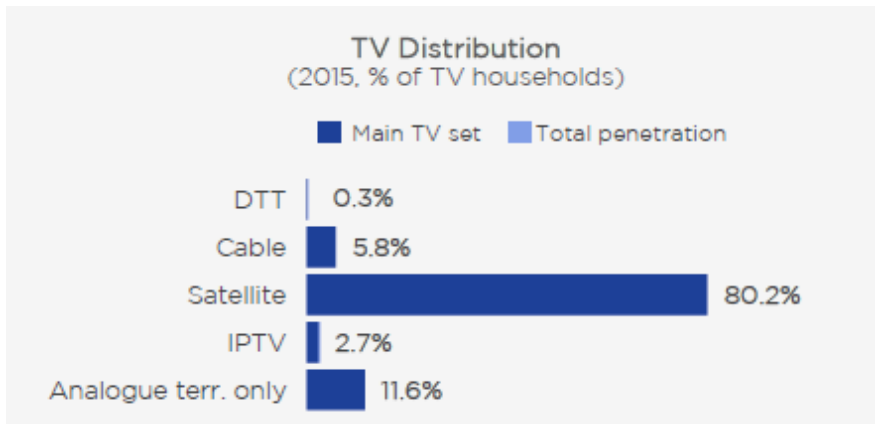
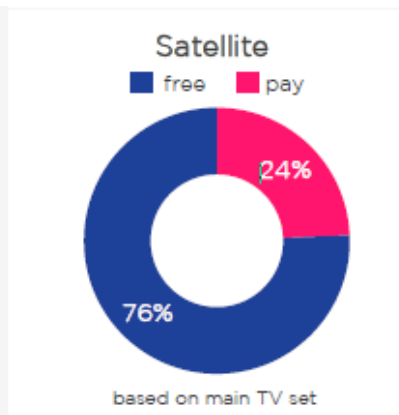
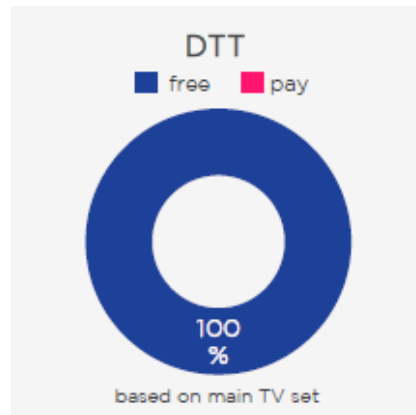
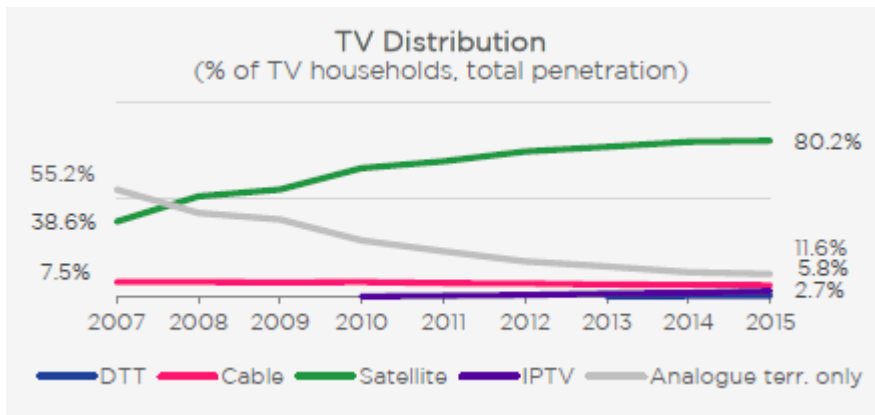
Strong uptake of DTT

Mobile services offered on DVB-T

28 FTA + 11 pay + 2 regional



DTV in Turkey



Heavily relying on satellite

Late in the transition to digital

TV Revenues: 51% Advert, 29% Subsc.

What Does This Mean For Turkey?

- Turkey is late in the ASO process
- However, this allows to introduce latest technology
 - DVB-T2, HEVC, UHD Phase 2
 - Future proof for the next decade
- All business options are open:
 - Pay TV platform with best quality (HEVC, 1080p50, HDR, new audio)
 - Mobile reception as best effort service
 - Free to Air with regional focus
 - Interactive services
- Beneficial for CE industry in Turkey

Come And Join Us

A nighttime photograph of Wat Arun in Bangkok, Thailand, with its golden spire and other structures illuminated and reflected in the water. The sky is a deep blue with a hint of purple. Overlaid on the right side of the image is the DVB ASIA 2016 logo, which consists of the letters 'DVB' in a bold, white, sans-serif font, followed by 'ASIA' in a similar font, and '2016' in a smaller font. To the right of the text is a circular graphic composed of two curved lines, one red and one green, forming a partial circle. Below the logo, the text 'Conference & Exhibition' is written in a white, sans-serif font. At the bottom of the image, the dates '29 Nov. - 1 Dec.', the location 'Bangkok', and the website 'www.dvbasia.org' are displayed in white, sans-serif font. The DVB logo is also present in the bottom right corner of the slide.

DVB ASIA 2016

Conference & Exhibition

29 Nov. - 1 Dec. Bangkok www.dvbasia.org

DVB