

Overview of the Hungarian DTT services after Digital Switch Over

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HUNGÁRIA

Short history

- 2008: tender for license of 5 DTT muxes till 2020
- 3 out 5 were available that time, the last 2 after ASO only
- According to Antenna Hungaria's bid 1 mux was dedicated for DVB-H that time
- Network deployment started in September 2008, and three sites were in operation by 1st of November already covering 56% of population
- In 2011 DVB-H license changed to DVB-T
- Successful ASO took place in 2013 in two phases
- Digital Dividend and ASO in 2013 in two phases (87 transmitters and combiners were retuned on 65 sites)

Key factors of a smooth migration from analogue to digital

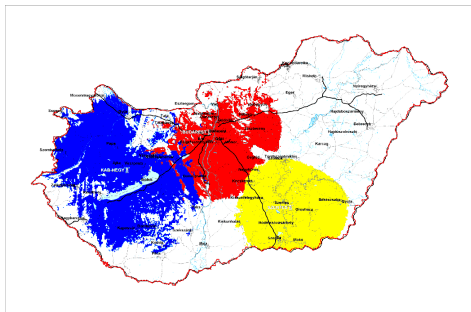
- Right communication in right time
 - Advertisement: flyers, educational video spots, posters
 - Hot line and webpage
 - Text message on the screen one before ASO on the analogue platform
 - Message on the screen for few days after ASO on the analogue platform
- Available receivers and trained staff in the shops
- Trained installer chain
- Smart phone apps: what is the right antenna direction in a given location
- Subsidy system

Some interesting feature of DTT service in Hungary

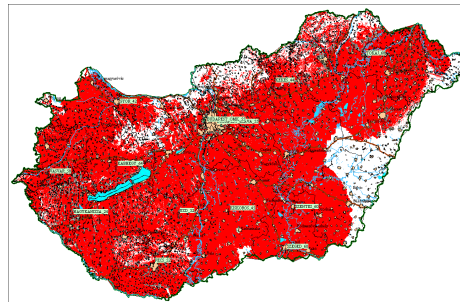
- Roof-top reception mode in rural areas, portable indoor in cities
- The goal was to provide the same coverage for all muxes
- Early bird adaptation of MPEG-4 compression
- Early bird for HD content
- AAC and Dolby AC-3 audio
- Teletext service
- AFD (Active Format Description)
- Sticker system for the receivers



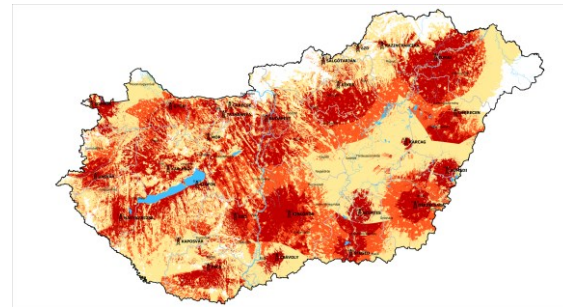
Network deployment year by year



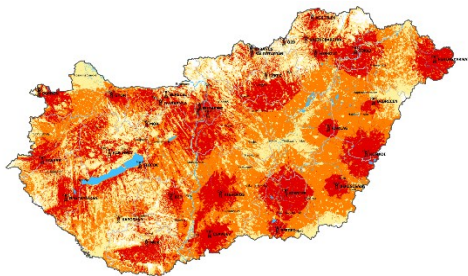
2008
3 sites
56% coverage



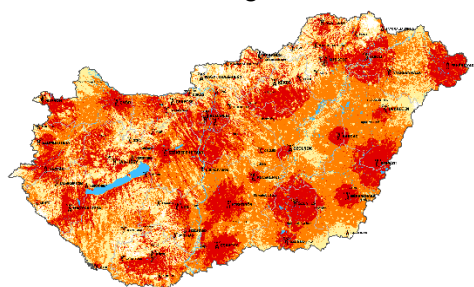
2009
14 sites
88% coverage



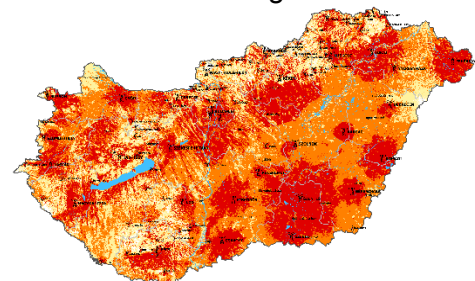
2010
29 sites
95% coverage



2011
50 sites
97% coverage



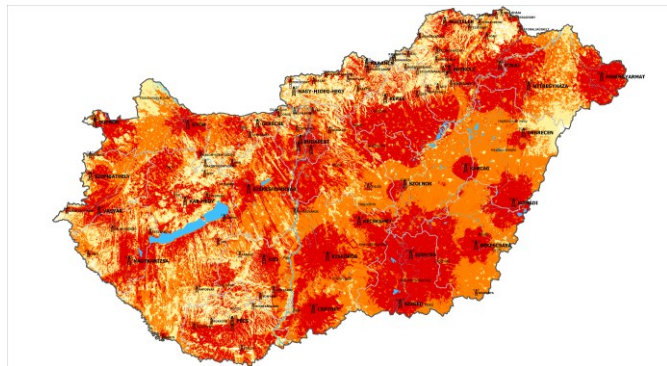
2012
65 sites
98% coverage



2013
90 sites
99% coverage

Current situation

MUX A&B&C&D
99%+ coverage



MUX E
only 85% coverage yet



4 high power site are not in operation yet
reduced power on 3 high power site
until 17th of June, 2015

DTT in Hungary

- AH operates a nationwide DTT network with **5 MUXs** providing:

- ❖ **FREE-TO-AIR – MinDig TV**

- ❖ **PAY-TV services – MinDig TV Extra**



MinDig TV
mindig hozzád közel



- 99% coverage (in case of four MUXs)
 - ❖ Number of **primary MinDig TV users** after ASO: ~ **750k households**
 - ❖ MinDig TV platform in ~**1 million households**
 - ❖ Marginal ASO **churn** of terrestrial platform, ~**2-3%**

MinDig TV



- 8 TV channels incl. 3 public channels in HD

- Public:*  M1 HD  M2 HD  DUNA HD  DUNA WORLD

- Commercial:*  RTL K L U B  tv2.hu  euronews 

- 4 *radio* channels  KOSSUTH RÁDIÓ  PETŐFI RÁDIÓ  BARTÓK RÁDIÓ  DANKÓ RÁDIÓ

-  **Official MinDig TV Store** chain – distribution of equipment, marketing of new services

-  **Official MinDig TV Service** network – technical backup

MinDig TV Extra



- 120k subscribers
- MinDig TV (free) + 48 channels in packages

KÓDOLATLAN

M1 HD M2 HD DUNA HD DUNA WORLD RTL KLUB tv2.hu euronews 8

ALAPCSOMAG

AXN FILM+ C+ FEM+ Disney+ RTL+ SUPER

hírTV aTV SPEKTRUM SLÁGER TV DIGIsport 1 hatoscsatorna www.hatoscsatorna.hu

OzoneNetwork d1 TELEVIZIO bonum X DORCELTV LUXURY DÉPÔTS TYPÉ

CSALÁDI CSOMAG

Discovery TLC VIASAT HISTORY NATIONAL GEOGRAPHIC CHANNEL 3 VIASAT COMEDY TVRINÉO RTL +

FOX Paramount CHANNEL 6 FILMBOX M3 Da Vinci LEARNING MAX

CN paprika sport 1 sport 2 ECHOTV muzsika tv

VILÁGJÁRÓ

ANIMAL PLANET DISCOVERY SCIENCE

NAT GEO WILD E

AKTÍV+

DIGIsport 2

HISTORY 5 BRAZZERS TV

FILMBOX PAK

FILMBOX PREMIUM FILMBOX FAMILY

HBO

HBO

KIEGÉSZÍTŐ CSOMAGOK

Alap vagy Családi csomagok mellé

What has happened since the analogue switch-off?

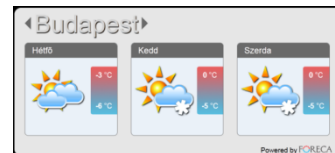
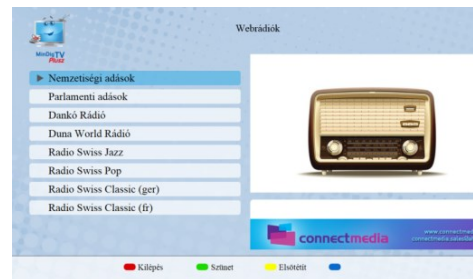
- Development in line with content consumption trends
 - ❖ Increasing content – C8, OW periods
 - ❖ Multiscreen
 - ❖ Hybrid TV – MinDig TV Plusz
- Objective: create an attractive and dynamic image for the platform



Hybrid TV – MinDig TV Plusz

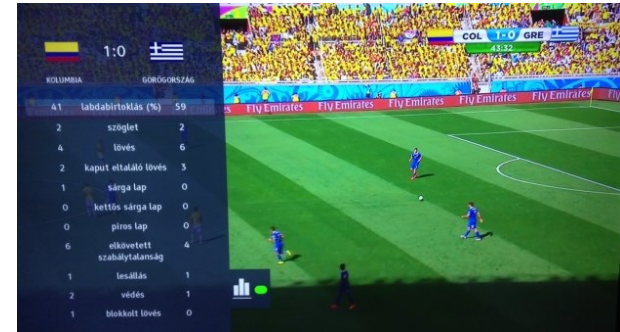
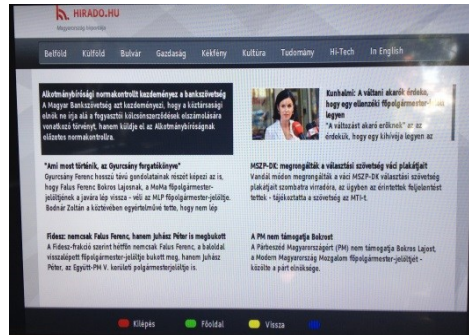


- HbbTV **penetration** (TV sets with HbbTV capability) in Hungary: over 300,000 Hhs
- **Decreasing price** of TVs with HbbTV functionality (also in middle price range) and 1/3 of smart TVs is HbbTV
- Free HbbTV trial launched in **October 2013** under the name MinDig TV Plusz (red button)
- **Trial content:** Rich EPG, Live TV and radio streams, Videos, News, Weather forecast, Web camera, Lottery, Voting engine



Commercial service – Médiaklikk

- Médiaklikk – HbbTV service on **public channels**, launched on 13 May, 2014
- Initiate service by **red button** on any public channel
- Médiaklikk red button is displayed every night in ~40,000 Hhs (this **reach doubled** in 6 months).
- **Content:** Rich EPG (including promos and catch-up), Some public radio channels, News, Weather forecast, Sports news



**Thank you for
your attention!**

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