

Switchover to Digital, Developments in Estonia

***“Digital Switchover in the EU”
Hotel “Radisson SAS Daugava, Riga, Latvia***

December 4th 2006

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Broadcasting in Estonia

1924 - Regular Radio transmissions started

1937 – Europe's most advanced 197m high radio mast built-up in Türi, Estonia

1955 - Beginning of TV-transmissions

TV market in Estonia today:

- ✓ 0,6 mil. TV-households (97%)
- ✓ 3 national TV-stations
- ✓ Cable penetration: 47%,
- ✓ SAT penetration 4%
- ✓ IPTV penetration 4%
- ✓ 45% are terrestrial viewers



Regional Perspective

- VERY small market: 1,4 mil. inhabitants, 0,6 mil. households
- Low density of population in rural areas
- Well developed fibre- and cable networks in city areas
- PSB financially very dependant of politicians
- Commercial FTA TV market limited to two by law – good position
- Small and limited advertising market
- GDP far lower than in EU, but growing (over 10% per annum)
- Population technologically very advanced
- Satellite-TV not popular
- IPTV take-off strong, but with a number of technical difficulties
- Broadcasting legislation out-of date
- At RRC-06 Estonia was allocated 8 DTT networks

Digital-TV in Estonia

- 1997 - First official document describing digitalisation of TV-broadcasting: “Main principles of the Estonian digital broadcasting development concept”
- 2000 - Channel 45 was allocated for DTT tests in capital area
- 2001 - Viasat starts digital satellite transmission to Estonia
- 2004 - Test transmission over DTT started in Tallinn
- 2005 - Starman launches digital cable-TV service
- 2006 - Elion launches IPTV service
- 2006 - First commercial mobile-TV services over UMTS by EMT
- 2006 - Commercial launch of DTT under brand ZUUMtv
- 12/2006 - 45-50 000 Digital-TV subscribers in Estonia totally

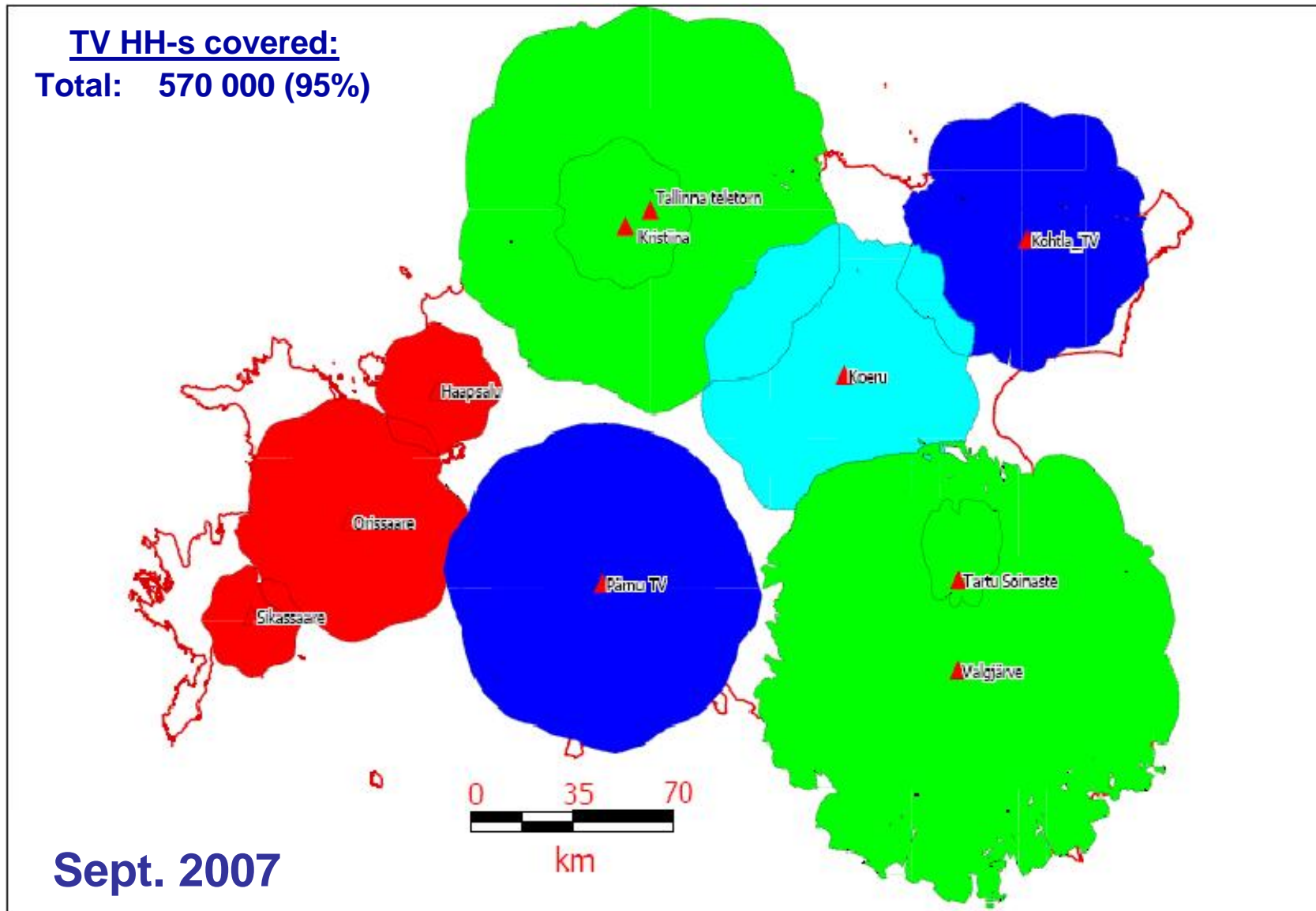


Digital Terrestrial TV

- Spring 2006:
 - Government decided that the analogue terrestrial networks must be switched off latest in 2012
 - Frequencies for 3 DTT networks were allocated to Levira
 - MPEG-4 has been chosen for video-compression
 - A combination of FTA and Pay-TV services, totally 30-36 TV-channels in 3 networks
- September 2006 - Levira and Starman established a joint venture to provide Pay-TV services over DTT
- December 2006 - launch of Pay DTT services, DTT coverage over 50% of population
- Summer 2007 - DTT coverage will reach 95% of population with indoor reception in Tallinn and Tartu cities



DTT Network Rollout Plan



Key Issues for DTT

- Government Policy for Analogue Switch Over
- Legislation
- Availability of frequencies, their international coordination
- Active role of PSB in DTT development, new content from PSB
- Involvement of commercial TV-s, new content, new channels, localization of international content
- Active Pay-TV operator with attractive content offering and extensive sales and marketing activities
- Increase of awareness of consumers, creating positive image towards DTT and digital television in general
- Availability of STB-s, their reliability and pricing
- Rollout and deployment of DTT networks in time

And Before I Finish...

AS Levria Ltd.



Founded in 1998

*51% of shares owned by
Estonian state*

49% by TDF of France

Total headcount: ~70

Revenues: 5,5 M€



Main Activities

❖ TV- and Radio Broadcast Services:

- *Analoque Radio & TV Broadcast Transmission*
- *DTT Transmission*
- *Network Planning and Measurements*
- *Monitoring and Maintenance*

❖ Audio-Visual Services:

- *Digital-TV Services*
- *Distribution & Contribution*
- *SNG and DENG*

❖ Broadband and Infrastructure Services:

- *Site Accommodation and Mast Works*
- *Wireless Broadband Networks (WiMax)*
- *Network Planning and Measurements*
- *Installation and Maintenance*



Aitäh

Thank You

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