



levira

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- ✓ Media management and play-out services
 - ✓ OB and SNG services, HD/SD
 - ✓ Broadcast network and head-end solutions
 - ✓ Telecom integration and commissioning
 - ✓ Site leasing and server hosting
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Levira – a key player in digital

Levira is a technical service provider, offering services to

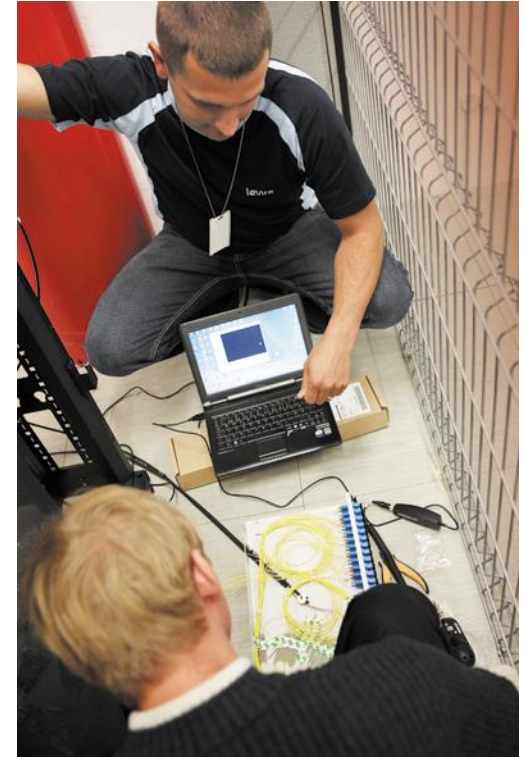
- Broadcast,
- Telecom, and
- Multimedia companies.

Levira engages in:

- content production,
- contribution,
- play-out,
- head-end,
- distribution, and
- transmission to numerous TV networks.

Levira is a developer and operator of platforms and networks for:

- DTT in SD/HD,
- FM,
- DVB-H,
- Telecom infrastructures.



Our Vision is to be the Preferred Partner for Broadcast & Multimedia Companies

Levira provides technical services for the entire broadcast value chain from content production to delivery to end-users.





Levira

- operates 3 nationwide analogue TV networks (ETV, Kanal2, TV3) and 3 nationwide DTT networks, all MPEG-4 AVC.
- transmits all National Radio and most of commercial radio channels
- quality & reliability of all services is assured by Levira's 24/7 NMC.



- 2003 - Levira initiated the start of DTT in Estonia.
- Today - 3 nationwide DTT networks have been put into operation.
- more than 30 digital FTA and pay-TV, local and foreign TV-channels are available in Estonia
 - in more than 95% of households.

Levira's one of the leading players in working towards the successful analogue switch-off in Estonia on July 1st 2010.



Levira is on its way to expand its competence and services in:

- OB-production and SNG occasional services
- Play-out and related activities
- Head-end solutions for linear and on-demand content
- RF networks planning, integration and management

Singing in the rain, sun or snow, HD or SD

OB – Outside Broadcast Services in HD and in SD formats.

Mobile Outside Broadcast vehicles are equipped with HD-cameras and a variety of long/wide angle lenses, suited for all kinds of productions.

All necessary technical facilities and equipment to fulfill the needs for any kind of production in HD and/or in SD formats.

Highly professional, multilingual technical staff with many years of diverse experience in broadcasting outdoors, are part of the service.



Live – any time, any place, anywhere

SNG – Satellite Broadcast Services and Occasional Use Contribution Services in both HD and SD formats.

Compact HD/SD SNG-vans with a fully redundant EBU Certified uplink for The Ku-band and with basic HD/SD production facilities suitable for all types of events.



Multichannel HD/SD play-out services

Play-Out, Fully automated content-insertion, Digitalization, Transcoding, QC and Archiving

Basic Play-Out service includes:

- HD or SD play-out
- Logging
- Automatically created on-screen menus, according to play-list metadata
- On screen graphic/texts/crawls etc.
- One audio tracks, open or teletext subtitles
- Compliance recording
- Archive space
- Live news feeds from XML/RSS feeds
- 24/7 monitoring
- Audio levelers and limiters



Multichannel HD/SD play-out services

Play-Out, Fully automated content-insertion, Digitalization, Transcoding, QC and Archiving

Additional services include:

- Simultaneous HD and SD play-out
- Additional audio tracks and languages for teletext subtitles
- DVB subtitles
- Compliance recording from networks
- Live broadcasts, control and monitoring
- Different service levels from 99,5% to 99,99%
- Play-list compilation for the channels



Levira's head-end is not a dead end

Head-End Services: Decoding, Encoding, Transcoding, Streaming, Scrambling, Multiplexing in any format and for any platform.



Service portfolio includes the following:

1. Signal reception from any well-known satellite position and through the optical lines
2. Light downlink for occasional services
3. Video format conversions
4. Many different options for AV noise reduction
5. MPEG-2 and MPEG-4 AVC SD/HD encoding
6. Direct transcoding from MPEG-2 to MPEG-4 AVC
7. Multiplexing and re-multiplexing

Levira's head-end is not a dead end

Head-End Services: Decoding, Encoding, Transcoding, Streaming, Scrambling, Multiplexing in any format and for any platform.



Service portfolio includes following:

8. EPG and ESG generation
9. Simulcrypt scrambling
10. Conversion between different transport layers
11. Dolby encoding
12. DVB monitoring
13. VBI teletext conversion to the DVB format
14. Splicing and add-insertion

Levira's head-end is not a dead end

Head-end services for DVB-H, DVB-T, IPTV & other platforms

DVB-T Head-end provides terrestrial networks with ready-for-transmission media signals. Levira operates 3 commercial DTT multiplexes in SD and one pre-commercial DTT MUX in HD. MUX-1 includes 6 FTA channels and MUX-2 and 3 are both designed to carry up to 12 Pay-TV channels.



Levira's head-end is not a dead end

Head-end services for DVB-H, DVB-T, IPTV & other platforms

DVB-H

Levira has integrated a new-generation DVB-H Head-end solution. It has significant advantages over traditional hardware based proprietary solutions:

- It has fully IP based architecture all through the technical chain until final encapsulated output and IP-insertion without any SDI or ASI interfaces.
- Common powerful encoding server can encode up to 16 live TV-channels simultaneously. Server platform includes error proof decoding, deblocking, and noise reduction ability.
- Compatibility with various handsets
- Access control



Levira's head-end is not a dead end

Head-end services for DVB-H, DVB-T, IPTV & other platforms

IPTV

Levira provides IPTV and cable operators with any encoded and customized (MPEG-2 or AVC, SD or HD, different levels and combination of components) program streams. Particularly we have worked with IPTV network operators in the Baltics.

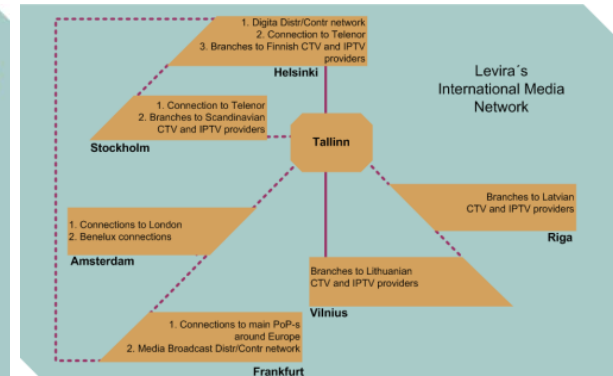
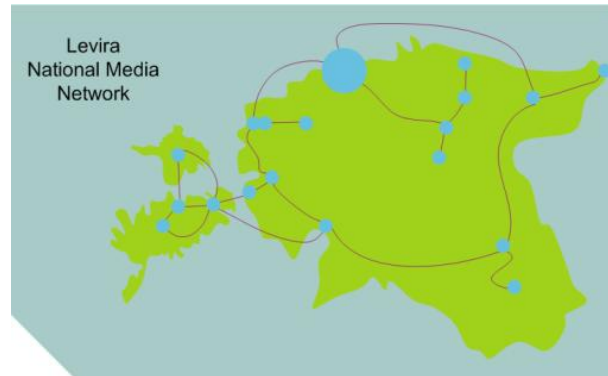
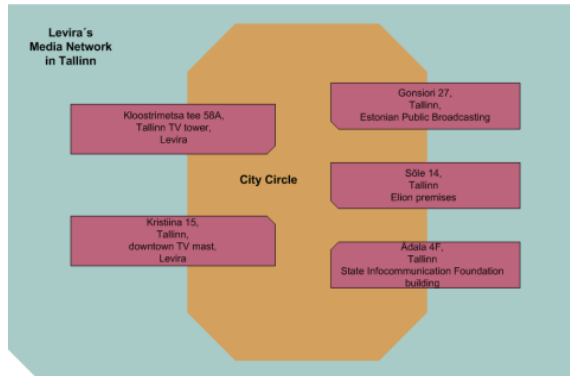
By using fully software based next generation signal processing, we are flexible and responsive to clients needs at extremely competitive price levels.



Distribution and Contribution Services for linear and non-linear content

Media Network consists of 3 logical parts:

- **City Circle** to connect all main location over the city.
- **National Network** to connect all main cities within the country.
- **International connectivity** for connecting necessary locations within different countries all over Europe and beyond.

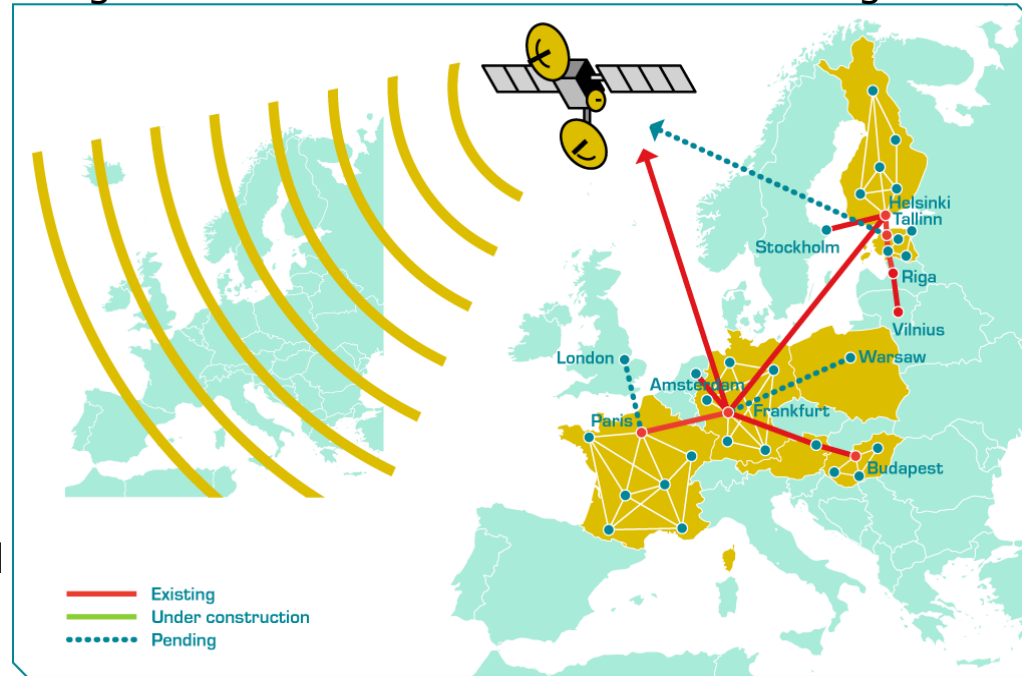


Distribution and Contribution Services

for linear and non-linear content

Levira's Media network is set-up and configured based on our customers' existing and anticipated future needs:

- To secure reliable delivery of SD/HD DTT MUX signals to transmission sites over the whole country with an ability to support SFN networks.
- To secure reliable delivery of incoming signals needed for DTT networks and Play-out facilities.
- To secure reliable and cost-effective distribution of SD & HD programs from Levira's Play-out to all required destinations and locations in Europe and beyond.



Whole Space for your needs

Levira server hosting

Level 1 server room in Tallinn TV-Tower is available for server hosting. It can be used as server hosting area for any kind of application starting from simple web-page hosting service until big MSC room for telecom operators.

Levira site leasing

Levira leases space for antennas and equipment for the implementation of different wireless networks. Our flexible service is tailored to each customer individually.

Secured power supply, backbone via fibre or microwave, first level maintenance, and other services are available on request.



Conformance testing

Levira has been licensed to perform conformance testing for iDTV-s and STB-s for DTT networks in Estonia.

All devices that pass conformance testing shall have a right to use a special “Digilevi” – DTT compatible – sign for their sales and marketing activities. “Digilevi” sign on the product assures consumers that this particular device works fine for Estonian FTA DTT and it has full country and language support. All sublicensed devices are listed on:

www.digilevi.ee



Caring and Sharing

- Levira is a partner for outsourcing media, broadcast and telecom infrastructures. Being a neutral and professional serviceprovider, we take care for TV-playouts, headends or RF network maintenance and add value to our partners.
- Levira offers professional services and consulting in the area of network planning, measurement, commissioning and other technical services.
- Levira can be of assistance in sharing its experience in preparing and completing the digital switch-over.



Why Levira:

- Quality at competitive price: The best does not have to be expensive
- Neutrality in the light of business as well as technology
- State-of-the-art facilities, full HD and SD support
- Flexibility and responsiveness
- Experienced, multilingual professional team
- Short launch terms and high service reliability
- Proved high customer satisfaction



levira



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