

Czech TV

Harris Helps Czech TV Reap Benefits of Centralized HD Master Control



Czech TV is the national public broadcaster of the Czech Republic and a recognized producer of films, documentaries and current affairs programs covering a broad range of genres, including news and major sports events. Czech TV broadcasts 24 hours a day on nationwide TV channels CT1, CT2, CT24 and CT4 SPORT using terrestrial and satellite distribution.



Czech TV master control room personnel use Harris Videotek multiformat monitors to track and measure HD-SDI signals.

CASE STUDY SNAPSHOT

Customer

- Czech TV — Czech Republic

Industry

- Broadcast Television

Business Challenge

- Czech TV sought to upgrade and centralize its master control facility at its headquarters in Prague. Czech TV's ultimate goal was to realize more value through upgraded channels and services, and ensure HD-readiness for future broadcasting.

Technology Solution

- IconMaster™ modular master control switcher; Platinum™ and Panacea™ routers; IconLogo™ on-air branding system; Videotek® VTM-2400 and VTM-4100 on-screen monitors; Q-SEE™ monitoring modules; NUCLEUS™ network control panels and CCS Navigator™ monitoring and control software

Business Value

- A highly streamlined and efficient master control workflow
- Reduced operating costs in the running of its four nationwide TV channels
- Increased viewer loyalty through rich image branding capabilities
- Future-proof — 3 Gb/s-ready architecture enables easy future expansion



A look at the new master control room reveals Harris master control switchers, control panels and on-screen monitors.

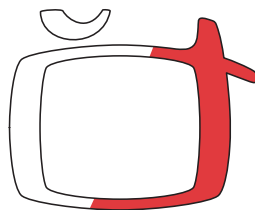
Business Challenge

As the broadcast industry evolves, trends such as simulcasting analog and DTV channels with commercial inserts — as well as increased demand for data services and content branding — make the master control function increasingly complex. Centralized master control facilities that provide not only flexibility in terms of multichannel operation, but also allow new channels and capabilities to be added in the future in a cost-effective way are of critical importance.

Recently, Czech TV sought to upgrade and centralize its master control facility at its headquarters in Prague. The ultimate goal was to realize more value through upgraded channels and services, and ensure Czech TV is HD-ready for future broadcasting.

Czech TV had been using a separate master control room (MCR) for each of its four channels, and the upgrade was to include moving from these four separate MCRs to a single, flexible MCR. This would allow Czech TV to assign more channels to one control room or move output programs to another hardware chain or set of devices, if necessary.

Czech TV sought a low-cost, scalable and modular master control solution — one in which new channels and capabilities, such as branding and surround sound, could be added with ease. Czech TV also wanted its facility to be able to transition from SD to HD broadcasting when the time was right, without having to reinvest in a completely new infrastructure.



ČESKÁ TELEVIZE

“After examining various options, Czech TV chose Harris to provide the core infrastructure for its upgraded master control room solution — not only because of the wide range of technology Harris provides, but also because of the strong interoperability among its products.”

Karel Trpak,
Head of Master Control Operations at Czech TV

Technology Solution

The new MCR facility at Czech TV includes a central rack room, five control rooms and a technical check room. At the heart of this new MCR is a core infrastructure that is HD-ready and built around two Harris® Platinum™ routers. The larger 28RU Platinum frame is used as an input router and connects all SD



Platinum 28RU router

and HD sources (including studio outputs, external feeds, IRDs, server playout ports and VTRs, among others) to six output chains. Each of those chains is built around an IconMaster™ modular master control switcher, which is fully configurable between SD and HD formats; a Panacea™ small router; a variety of audio processing equipment; a VBI inserter and a legaliser. The smaller 15RU Platinum frame is used as an output router and connects the outputs of each of the six chains

to the different distribution methods of each program. The distribution system includes a connection to analog or DVB-T transmitters, DVB-S uplink or IPTV. Both input and output routers can be surrounded by various input or output processing modules and devices as needed.



IconMaster master control switcher

To help Czech TV protect its brand, the IconLogo™ on-air branding system provides four-layer logo generation in HD and SD, and insertion over program signals. These four layers support stills, animations, bugs and audio; crawls and EAS alerts; and time and temperature. IconLogo is tightly integrated with the IconMaster master control switcher.



VTM-2400 on-screen monitor

Centralized technical monitoring and control within the MCR is performed using Harris Videotek® VTM-2400 and VTM-4100 multiformat on-screen monitors, which track and measure HD-SDI (1080 and 720) and SD-SDI (525 and 625) signals. Harris Q-SEE™ monitoring modules provide detailed quality control measurements for SD/HD signals with advanced alarm thresholds, thumbnails and optional MPEG-4 streaming. Czech TV operators can obtain detailed information on the signals moving through their network from anywhere at anytime, and being able to “see” what’s going on significantly improves an operator’s ability to react.



NUCLEUS control panel

Tying the solution together are the Harris NUCLEUS™ network control panels and CCS Navigator™ monitoring and control software, which centralize the operational control of the processing, branding and routing products and allow Czech TV engineers access to the whole infrastructure from a single location.

Business Value

- Harris provided Czech TV with a low-cost, scalable and modular master control solution, as well as the ability to transition from SD to HD broadcasting without having to re-invest in a completely new infrastructure.
- Reduced operating costs was a key benefit of the upgrade. The transition from four separate MCRs to a single, flexible MCR significantly reduces the costs of running Czech TV's four channels, because it enables a much more streamlined and efficient workflow.

- The Harris on-air channel branding system enables Czech TV to promote rich image branding and elevate its brand, utilizing features such as time/temperature, still/animations, audio clip playback and text crawls for breaking news. Strong image branding helps attract and retain viewers.

Although all four channels still broadcast in SD today, at least one of the channels will be switched to HD in 2009. After a testing phase, Czech TV plans to start regular HD service.



Czech TV reaps the benefits of a centralized master control room.

To learn more, please visit www.broadcast.harris.com

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