

## Mobile Links Europe AB expand with DirectOut and RAVENNA

Swedish-based Mobile Links Europe AB are Northern Europe's leading partner in the delivery of broadcast media. Their services deliver connectivity and transmission via satellite, fibre infrastructure and microwave. With a successful portfolio of productions spanning numerous international live sports events, news reports, video conferences and corporate events, Mobilelinks have a proven record of executing services reliably and cost effectively on a global scale.

In this case, Mobilelinks' client was a large Nordic broadcaster, who required a solution to connect their various Nordic/European locations with both audio and intercom links to streamline their operations.

Currently, Mobilelinks are in possession of nine EXBOX.RAV which work in this network, plus a further four EXBOXes that work as a MADI bridge to clients' RAVENNA/AES67 networks. The AES67 technology is also fully interoperable with equipment from Riedel and Lawo that is present in the network. The boxes in Oslo, Copenhagen, Stockholm, Helsinki, Amsterdam, and Warsaw were connected to Mobilelinks' existing Nimbra/DTM network and synchronised with a Precision Time Protocol (PTP) that originates in Stockholm where both companies are Wednesday, 12 April 2023 11:43

headquartered.

There are some huge advantages to the DirectOut technology that motivated Mobilelinks to utilize their equipment. Firstly, the FastSRC technology delivers straightforward, high quality sample rate conversion, even when the EXBOX is connected to different digital audio interfaces, which is crucial in extended networks.

Interoperability over such a large network was vital, and the EXBOX devices' compatibility with the open RAVENNA standard allows for this. RAVENNA delivers low latency, full signal transparency and high reliability, which are essential components of any successful broadcast and streaming service. Likewise, the system was created with in-built redundancy: should the primary red network fail for whatever reason, the secondary blue IP structure will kick in to guarantee continued operation.

"After assessing several options, we opted for the EXBOX.RAV. The technology is cost-effective, flexible, and easily scalable, so the decision was a no-brainer. Additionally, the boxes connected easily to our NMOS system and converted the MADI signals to fit in our RAVENNA/AES67 more smoothly than alternatives," explains Martin Simons, the primary technician for Mobilelinks, who advocates some further benefits of the EXBOX.RAV: "Significantly, devices in the EXBOX series allow for a complete air gap, which provides an extra layer of security to the network."

"The EXBOX's have worked flawlessly since we bought them. As integrators and providers, it's a dream to work with cutting-edge technology that is focused on maximising interoperability, without a reduction in performance," continues Simons. "The DirectOut team have created a fantastic, powerful and compact product, and certainly made the correct decision in making a version that is RAVENNA/AES67 compatible, in the interest of striving for a more interconnected world!"

www.ravenna-network.com www.directout.eu www.mobilelinks.se