



## OB VAN ENVIRONMENT

Helping a Broadcaster with incompatibility problems

### Customer Profile

Norddeutscher Rundfunk (NDR) is part of DAS ERSTE the nationwide public network German TV ARD. It covers northern Germany's regions Hamburg (where it is based), plus the states of Lower Saxony, Mecklenburg-Vorpommern and Schleswig-Holstein 24 hours a day with ambitious, high-quality programmes which are characterised by their journalistic competence and diversity.

It is not only the programmes, but also the local events that the NDR hosts that has made the NDR an essential part of cultural life in northern Germany.

### The dilemma

To cover the mentioned territories, NDR has two SD and one HD OB trucks, four SNG trucks and four small editing mobiles.

Currently, this broadcaster is upgrading its OB trucks to handle HD and at the same time introducing a tapeless workflow.

In doing this upgrade, NDR has run up against 'wrapper' compatibility problems between its EVS video servers and its Avid Media Composer standalone editors.

The reason: EVS uses in association to the XT2 video server the X-File that does not provide the right wrapper and index

reference to allow editing while recording in Avid stand-alone editors in both NDR SD and HD workflows.

NDR's EVS XT2 servers are instrumental for sports programming providing a quick-turnaround of highlight editing and slow-motion video clips. However, it is not possible for this broadcaster's Avid editors to access video while it is being recorded in real time by EVS.

To do so would require stopping (or chunking) the recording, so that the MXF video files could be finalized and loaded into the Avid Media Composer. In addition to this wrapper constrain, EVS ingest server records the media as SD using the IMX video codec but for HD does not support the NDR format of choice, the MPEG long GOP XDCamHD 4:2:2 for Avid to edit while recording.

This has limited NDR to use it in the SD Vans and with closed files (editing after recording).

*"When a soccer-game is finished, we have about 10 minutes to finish an 8 minute report for airing, and that is very little time"*

*Hans Georg Lorfing; Head of NDR's Outside Broadcast Division*

## Solution

NDR has resolved its SD and HD dilemmas through the installation of MOG's mxfsPEEDRAIL F1000s within the broadcaster's SD OB trucks and with MOG's mxfsPEEDRAIL S1000s for the HD OB's.

The mxfsPEEDRAIL F1000 is capable of capturing incoming MXF OP-1A video –HD-SDI or SD-SDI – while it is being recorded, converting it to Avid OP-Atom on the fly, and importing the converted video directly into an standalone Avid editor while the EVS continues to record (NDR uses this workflow only in SD with IMX-50). In addition to this, the editors will be provided with a reference file (AAF) that will allow them to simply drag and drop it into the video bin as one master clip and manage all the several Avid OP Atom wrapped files that are generated in each take.



SD OB vans

1 mxfsPEEDRAIL F1000 Ingest Software

EVS Xt2 Servers

Avid MediaComposer Editor Stations



Captures MXF Op1a video while is being recorded and converts it to OP-Atom on the fly



Import the converted video into the editor.



HD OB vans

4 mxfsPEEDRAIL S1010 XD.SD

Standalone System

Avid MediaComposer Editor Stations



Records directly from SDI to the Avid NLE's



Edit-while-recording in standalone mode



## Benefits

The Avid NLE's editors have direct access to the live video just seconds after it has been ingested. This allows them to start compiling highlights packages while the game is underway; providing material for covering intermissions and end-of-game wrap-ups.

In addition to the enhancements in the EVS and Avid SD-workflow the HD OBVans and small editing units just use the mxfsPEEDRAIL S1000 to make the **recording directly from SDI to the Avid NLE's allowing editing-while-recording even in standalone mode** and without an Avid Interplay system that would require additional investment and staff to manage it.

For this HD workflow the video codec in use is currently DNxHD but NDR plans to migrate to XDCAM HD 4:2:2 long GOP as soon as this is available for Avid standalone editors. NDR wants to achieve a single HD-file-format from acquisition through archive.



mxfsPEEDRAIL is the perfect solution for live operations in OB Vans productions, as it offers a highly compact solution unmatched in the market.