Introduction of ARD_ZDF_HDF profiles for exchange and delivery of MXF files

ARD and ZDF decided to introduce well defined profiles for MXF files that are delivered to or exchanged by the broadcasters. Six profile, each describing a subset of the MXF standard, were defined by an internal working group. Together they cover video codecs and formats that are currently used by ARD and ZDF. Introducing these was considered the best way for improving interoperability with MXF applications.

The ARD_ZDF_HDF profiles (version 1.1) should be used for file delivery and exchange. From January 1rst 2017 on, all MXF file are delivered to or exchanged by ARD and ZDF will have to be conform to one of the six MXF Profiles.

ARD_ZDF_HDF01a	XDCAM HD422, 1080i/25, 8 mono AES3 tracks
ARD_ZDF_HDF01b	XDCAM HD422, 1080i/25, 16 mono AES3 tracks
ARD_ZDF_HDF02a	AVC-I 100, 1080i/25, 8 mono AES3 tracks
ARD_ZDF_HDF02b	AVC-I 100, 1080i/25, 16 mono AES3 tracks
ARD_ZDF_HDF03a	AVC-I 100, 720p/50, 8 mono AES3 tracks
ARD_ZDF_HDF03b	AVC-I 100, 720p/50, 16 mono AES3 tracks

List of published MXF Profiles

The file format MXF has been established as professional file format for program material within the complete production chain. Still standard compliance is no guarantee for interoperability, mainly due to the wide range of the use cases that are covered by the MXF standard. For that reason broadcasters keep facing interoperability problems with MXF files between various applications in their production workflows. ARD and ZDF initiated a working group, in order to investigate and give recommendations on quality management in file based production. In particular, it should provide solutions for an improved interoperability with MXF files.

Findings lead to the specification of profiles for MXF files. Relying on a specified subset of the MXF standard is supposed to ensure a better dependability in production environments. The MXF profiles are the basis for the reduction of interoperability problems and a solid ground for automated quality control using file based QC-Tools. The first version v1.0 was published in August 2014. After a period for testing and feedback the latest version v1.1 was published in June 2015, including minor profile updates. At current state no further updates are planned.

Various manufacturers already support or announced to support ARD_ZDF_HDF profiles in their products. Since January 2015 the IRT offers a certification service, that allows broadcasters and manufacturers to apply an in-depth analysis of their MXF files, relating to the MXF profiles.

Downloads:
All six ARD_ZDF_HDF Profile are available here:
www.irt.de/de/publications/technical-guidelines.html

Links:
Further information, especially regarding Quality Control, are available here:
http://mxf.irt.de/mxfprofiles/index.php

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