INTERNATIONAL ORGANISATION FOR STANDARDISATION
ORGANISATION INTERNATIONALE DE NORMALISATION
ISO/IEC JTC1/SC29/WG11
CODING OF MOVING PICTURES AND AUDIO

ISO/IEC JTC1/SC29/WG11 MPEG2012/M26907
October 2012, Shanghai, China

Source **Telecom ParisTech**
Status **For consideration at the 102nd MPEG meeting**
Title Support for meta boxes in movie fragments
Authors Cyril Concolato, Jean Le Feuvre

1 Introduction

Some meta-data streams may reference external resources, such as images or fonts, which can usually be embedded in ISOMBMF files through the meta box. This packaging has several advantages over direct linking to a server location, among which simplified distribution of the content which can be consumed without any external dependencies, or resource protection through the item protection tools of ISOBMF.
However, meta boxes (and their optional containers meco boxes) can only be carried at the file level, moov level or track level, with at most one meta (or meco) box in each container. When a meta-data stream created on-the-fly needs to be carried in a DASH context, updating the meta box becomes problematic as one cannot send a new meta or meco box on the fly.

2 Proposed Solution

We suggest allowing for meta/meco boxes at the traf level. In order to avoid any issue when multiple meta/meco boxes could collide on the same level, we suggest the following behavior:

- Normative: any meta/meco box at the trak level, or at the traf level of previously received fragments shall be merged, when a new fragment contains a meta/meco box at the traf level.
- Normative: When defragmenting a file, meta/meco boxes from track or traf levels are merged into a single meta/meco box.
- Merging: Items from different boxes with the same ID are considered identical, and only one of them shall be kept in the merged meta/meco box.
- Note: If the author desires defragmentation, item IDs should be selected carefully.