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CODING OF MOVING PICTURES AND AUDIO**

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Status **For consideration during MPEG #116**
Title **On Default Sample Group Descriptions in Movie Fragments**
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1 Introduction

While implementing default sample groups in the context of MPEG-DASH, we have encountered an unclear area in ISO/IEC 14496-12 on sample group descriptions. This contribution exposes the issue and proposes a solution.

2 Problem statement

A sample group description may use in version 2 or above the notion of “default” association, mapping all samples to the sample group description entry indicated by `default_sample_description_index` for a given grouping type in the `sgpd` box. While this works fine in non-fragmented files and in most fragmented files where the sample group description never changes, it may happen that a sample group description box of the same `grouping_type` value is declared in a track fragment with a `default_sample_description_index` different from the one declared in the sample table. The specification does not indicate how the « merged » `sgpd` behaves as far as default entry is concerned, and this should be solved.

3 Proposal

We propose to add in 8.9.4

“When a sample group description “A” using a `default_sample_description_index` is present in a track fragment, that `default_sample_description_index` shall indicate the 1-based index of a sample group description entry of the same `grouping_type` declared in the sample table, or the 0x10001-based index of the entry of that sample group description “A”. For any track fragment, the default sample description entry for a given `grouping_type` is the one indicated by the sample group description box of the same `grouping_type` declared in that track fragment, if any; otherwise by the sample group description box of the same `grouping_type` declared in the sample table of the track, if any; otherwise, no default entry is used for that `grouping_type`.”

4 Recommendation

We recommend to add the proposal in a COR on 14496-12.