

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

**ISO/IEC JTC1/SC29/WG11 MPEG2016/M38230
April 2016, Paris, France**

Source **Telecom ParisTech**
Status **For consideration during CMAF AhG**
Title **A proposal for the development of CMAF documents**
Author **Cyril Concolato**

1 Introduction

CMAF documents are expected to reach a large audience in the industry and open source community. In order to produce high quality documents, this contribution proposes a new process to develop them.

2 Proposal

2.1 Use of HTML documents as pivot editing format

It is proposed to edit the CMAF documents using the HTML format with the Respec framework¹. This framework has been and is still used successfully to develop plenty of W3C standards.

The benefits of using HTML and this framework are as follows:

- using a text-based format allows for better versioning in systems like SVN or Git and better tracking of edits wrt. meeting decisions,
- improved readability of the spec thanks to CSS styling,
- RFC 2119 terms (shall, shall not, may ...) are automatically highlighted making them highly visible,
- links to definitions are easy to add (easier than using MS Word) avoiding ambiguity in the standard
- management of references is simplified

An example of what a CMAF HTML document could look like is available here: <http://cconcolato.github.io/cmaf/>.

2.1.1 Conversion to MS Word

It is proposed to convert the HTML document to the MS Word format, under the editors' responsibility, following the ISO template, for the purpose of issuing MPEG output documents.

¹ <https://www.w3.org/respec/>, <https://www.w3.org/respec/guide.html>

2.1.2 Conversion to other formats

Using Respec, the HTML specification can be easily converted to PDF (using Chrome's browser "Save as PDF") or ePub.

2.2 Using Git

Is it proposed to use a single, official repository to manage issues and spec editing. This will allow for MPEG members to comment on via a Git viewer and/or to prepare pull requests to propose changes to improve the spec. This should help editors work.

It is ***NOT*** proposed to modify MPEG's decision process:

- the standard will be modified based on the agreements during the MPEG meetings.
- Contributions should still be submitted to MPEG, ideally with a reference to a pull request

Pull requests made on the spec would be treated as follows:

- it is proposing pure editorial changes, the editors will be able to integrate the PR to the specification
- it is proposing technical changes, the PR will be discussed during the meeting:
 - o if accepted without modifications, it will be merged by the editors
 - o if accepted with modifications, the editors will select from the PR the parts to be merged
 - o if not accepted, the PR will be ignored.

2.3 Using GitHub

It is proposed to use GitHub as the Git repository for the CMAF documents

This would allow for:

- non-MPEG members to see, comment and prepare PR on the spec
- search engines to index the spec, increasing the possibility of public feedback.

2.3.1 On public documents

As indicated in "ISO/IEC Directives, Part 1 Consolidated JTC 1 Supplement 2015 — Procedures specific to JTC 1"², Clause 2.13 "Copyright":

"In ISO and IEC, there is an understanding that original material contributed to become a part of an ISO, IEC or ISO/IEC publication can be copied and distributed within the ISO and/or IEC systems (as relevant) as part of the consensus building process, this being without prejudice to the rights of the original copyright owner to exploit the original text elsewhere."

Hence, each contributor to an MPEG standard retains the ability to publish the same text elsewhere.

It is proposed to exercise that ability by using the following principle:

- Contributors should publish first their text inputs on GitHub, possibly via a Pull Request, and then to upload a contribution within the ISO process pointing to that GitHub input and/or Pull Request.

2

3 Conclusion

We recommend the MPEG AhG to adopt the above process for the development of CMAF documents.