**Workshop on Electronic Books and the Open Web Platform**

## Expression of interest in participating in the Workshop

## SVG support in EPUB Reading System

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# Participant's interest

Hachette Livre[i], publishing group number one in France with 60 different brands, has been producing ebooks in EPUB format since 2008. This universal format allows Hachette Livre to address the digital market with a single file benefiting from the set of W3C standards gathered in the EPUB specifications.

Among these W3C standards, the SVG (Scalable Vector Graphics 1.1) is of highest interest inside EPUBs for many reasons to be detailed below.

When talking about what's new in version 3 of EPUB, Bill McCoy, IDPF Executive director, always says that "SVG is now first-class citizen"! And indeed, it is a fully conformant component of EPUB V3 specifications in EPUB Content Documents 3.0 (Section 2.3: SVG Content Documents). Unfortunately, in the current set of available EPUB Reading Systems, SVG isn't at that level of support and many of our ebooks file cannot be displayed with enough quality, when at all, though using plain standard SVG constructions.

# Point of View

The SVG standard brings to ebooks the power of scaling, positioning and identifying:

- In books, many graphics are efficiently produced in vectors through tools like Illustrator to insert in pages mathematical figures, maps, art drawings, texts on curves, etc. The power of vector graphics brings the highest quality to print pages with the lowest weight compared to pixels images. When reused for ebooks, the best way to preserve the quality of the design in the more efficient standard is SVG,
- With the advent of Fixed Layout EPUB, SVG has brought to ebooks production its precise way to position objects in a 2D area as it is on a paper pages. This brings to the eBook market the possibility to distribute digitally printed books that were never imagined in digital format due to their sophisticated layout, part of their success,
- SVG being an XML tree, any node of its hierarchy can still be identified allowing in any number of transformation the XML world allows, and to start with, links from graphic objects to their text description elsewhere in the eBook: just think an icon of a restaurant in a map as being the start point of a link to its internal description or external website.

This power of SVG is expressed here only in terms of static display, it doesn't cover all the dynamic aspects of SVG, but as it is here demonstrated, it covers the digitalization of books content, as described in the EPUB specifications (2.3.3 Restrictions on SVG 1.1).

## Suggestion

Based on "W3C Scalable Vector Graphics (SVG) Test Suite", an EPUB SVG Conformance test file will show participants the extent of SVG support in Reading system on various platforms. In the current IDPF project of "EPUB3 test file", some features of SVG are already addressed and it should be completed to match the W3C SVG Test Suite at the extent of EPUB3 specifications support.

This would help workshop attendants to figure out which SVG coding is appropriate to get the best rendering for the time being, and would help developers of RS to prioritize their roadmap to complete SVG support.

## Reference

W3C Scalable Vector Graphics 1.1: www.w3.org/TR/SVG11/

IDPF EPUB Content Documents 3.0: idpf.org/epub/30/spec/epub30-contentdocs-20111011.html

W3C Scalable Vector Graphics (SVG) Test Suite :
www.w3.org/Graphics/SVG/WG/wiki/Test_Suite_Overview

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[i] Hachette Livre : http://www.hachette.com/en/