# W3C WEB & TV THIRD WORKSHOP MICROSOFT POSITION PAPER

#### PARTICIPANT STATEMENT

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#### **ABSTRACT**

At the second W3C Web and TV work shop Microsoft and other companies discussed the need to define cross-platform broadband video standards supporting adaptive HTTP streaming, common encryption and DRM interoperability.

Six months later we find that these standards are becoming a reality, enabling scenarios which HTML5 should support. At the third Web and TV work shop we would like to discuss the impact of these emerging international standards on content creators, distributors and consumers, and the importance of HTML5 supporting these scenarios.

In our presentation we would provide an overview of these emerging standards, share thoughts on the scenarios enabled by these standards, and suggest ways that HTML5 might support those new scenarios.

### INTERNET TELEVISION STANDARDIZATION

At present there are a number of international standard development organizations and industry for a doing work of importance to content creators and distributors. For example:

- On July 22nd, 2011, MPEG finalized the technical aspects of the Dynamic Adaptive Streaming over HTTP (DASH) specification. It is expected to be published as ISO/IEC 23009-1 in coming months. DASH is a feature rich standard developed by 90+ leading experts participating from 50+ companies. Significantly, efforts are being made to keep the ISO MPEG and 3GPP specifications for adaptive HTTP streaming aligned.
- ISO MPEG DASH supports both ISO Base Media File Format (ISOFF) and MPEG2
   Transport Streams (M2TS) and has defined 5 profiles addressing various applications and services. The ISOFF profiles also support the new DRM-Interoperable Common Encryption (CENC) specification.
- Published with MPEG-DASH will be Amendment 3 to the ISO Based Media File Format (ISO/IEC 14496-12 AMD3) and a new common encryption specification (Common

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Encryption in ISO base media file format files ISO/IEC 23001-7). And efforts are underway in several industry fora to define Internet video profiles of open authorization standards such as OAuth 2.0.

These emerging international standards will have a profound impact on how end users consume entertainment content. The Internet is becoming a video network, so how these emerging standards find expression in W3C specifications is most important.

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