

Liaison Statement

Source: DVB Technical Module Ad-Hoc Group on Companion Screens and Supplementary Streams (TM-CSS)

To: W3C Web and TV Interest Group

Yosuke Funahashi  
Co-chair of Web and TV Interest Group  
[yfuna@tomo-digi.co.jp](mailto:yfuna@tomo-digi.co.jp)

Giuseppe Pascale  
Co-chair of Web and TV Interest Group  
[giuseppep@opera.com](mailto:giuseppep@opera.com)

Mark Vickers  
Co-chair of Web and TV Interest Group  
[mark\_vickers@cable.comcast.com](mailto:mmark_vickers@cable.comcast.com)

Title: Liaison Statement on CSS work and intention to begin verification and validation activities.

Contact: Matt Hammond  
Lead for the Verification and Validation activity within TM-CSS  
[matt.hammond@bbc.co.uk](mailto:matt.hammond@bbc.co.uk)

**Cc:** Kevin Murray  
Chair, TM-CSS  
[kevimurr@cisco.com](mailto:kevimurr@cisco.com)

Peter Siebert  
Executive Director, DVB Project Office  
[siebert@dvb.org](mailto:siebert@dvb.org)

October 2014

Dear W3C colleagues,

**Specifications for Companion Screens and Streams**

We wish to inform you that DVB is creating specifications for companion screens and streams (CSS). These enable the creation of "second screen" experiences on companion devices (such as tablets and mobile phones) that are synchronised to the television experience. These also provide an architectural and conceptual framework for the general problem of expressing and determining the timing relationship between media streams.

Work is largely complete and all parts will eventually be passed to ETSI for final publication, although some parts have been made available now in final draft form.

**Part 1** is a non-normative description of the overall architecture and provides explanatory examples of how the rest of the specification can be implemented to meet various use cases.

**Part 2** defines broadcast signalling and protocols and interactions between broadcaster, television device and companion device via the home network to identify content on the television and synchronise to it. This part is available now via the DVB website as Bluebook 167-2 [1].

**Part 3** defines the use of UPnP to discover the television device via the home network.

**Verification and Validation activity**

This autumn, we plan to follow up on the creation of part 2 of the specification with an activity to verify and validate the specification. The goals of this activity include:

* Validating the specifications fulfils use cases such as those outlined in part 1;
* Creation of test assets (streams, metadata);
* Gaining experience of implementing architectural roles;
* Identifying any issues requiring corrections or further revision of the specification.

We are in the process of defining more detailed outputs and timescales over which this work will take place.

We would be grateful if you can provide details of any relevant work you are undertaking.

Kind regards,

Matt Hammond

1. DVB Bluebook A167-2 "DVB Companion Screens and Streams; Part 2: Content ID and Media Synchronisation"  
   Available at: <https://www.dvb.org/search/results/only/standards/page/1/items/12/keywords/A167-2>