



News

For Immediate Release

OPEN MOBILE VIDEO COALITION RELEASES NEW PRODUCTS TO HELP TV STATION ENGINEERS AND CONSUMER ELECTRONICS MANUFACTURERS IMPLEMENT MOBILE DTV SERVICE

*Mobile DTV Coverage Prediction Model, Mobile Broadcast Scenarios,
Electronic Service Guide Recommendations Now Available for Engineers and
RF Capture Program Offers Recorded Signals for Mobile DTV Device Design*

NEW YORK – June 28, 2011 – As TV station engineers and consumer electronics firms gather in New York to learn more about the emerging Mobile Digital Television system at the “Mobile DTV Tech Essentials” conference, several new tools are being released by the Open Mobile Video Coalition (OMVC) today that will help Mobile DTV consumer electronics product manufacturers enhance Mobile DTV reception by reducing the need for expensive field testing of newly-designed Mobile DTV consumer products and will help TV station engineers design robust Mobile DTV systems.

The new products and services are being introduced today at a conference jointly sponsored by OMVC and *Broadcast Engineering* magazine. Mobile DTV is already available from some 75 broadcasters who have made the necessary upgrades to provide the new service to viewers. OMVC is forecasting that Mobile DTV service will reach two-thirds of the viewing public over the next year, as many more stations add Mobile DTV capability to their transmission systems.

“Mobile DTV is designed to be transmitted alongside the same digital TV broadcasts that bring local news, weather, traffic, sports, and favorite programs to viewers in high-definition. But the signal qualities of Mobile DTV are quite different than HDTV transmissions, because antennae in Mobile DTV receivers are usually lower to the ground and always on the move. Similar to the process used in the earlier development of fixed HDTV consumer products consumer electronics manufacturers can use recorded streams for lab testing of new Mobile DTV products, and the OMVC has been busy developing several new services that will help all parts of the ecosystem deploy the best system for local viewers,” said OMVC Executive Director Anne Schelle.

Newly published on the OMVC.org web site is a Mobile DTV Propagation Study that reviews the reception characteristics of the mobile video service and details about the “RF Capture” program service for device manufacturers. OMVC is also releasing two other important documents for broadcast engineers at this week’s Tech Essentials conference: a recommended practices document for deployment of Electronic Service Guides and a presentation about the most likely broadcast scenarios for Mobile DTV services, including 11 use cases for multiple channels at varying qualities of transmission.



Predicting Mobile DTV Reception in a Local Market

Unveiled at today's conference is OMVC's new Predictive Model for reception of UHF (Channels 14 to 51) Mobile DTV signals. The model is intended to predict signal coverage in automobiles with an antenna mounted on the vehicle, in a handheld unit operating outdoors, and a handheld unit operating indoors. Broadcaster radio-frequency (RF) experts can use this new Model to predict future coverage of existing or future transmit facilities.

"While there are different models used to predict broadcast signal coverage, we've opted for a 'semi-empirical' method that uses a blend of actual field reception data and theory. With information about the local terrain, antenna height, frequency, and polarization as well as details about the receiver and atmospheric conditions, we can predict signal strength for mobile broadcasts with this model," Schelle said. The results are local maps that show where Mobile DTV reception can be expected to be robust. Subsequent field testing with automobiles showed the predictive model to accurately correlate to actual conditions.

Future iterations of the Predictive Reception Model will consider the impact of elliptical or circular polarized transmission antennae, the effects of tall buildings near receivers, and details on predictive reception for VHF reception.

Signals from RF Capture Program Now Available

Over the past several months, OMVC has coordinated the "capture" (or recording) of live over-the-air Mobile DTV radio-frequency (RF) signals in the Washington, D.C. market.

OMVC continues to promote system improvement work through its work on Mobile DTV RF measurements and RF signal capture program. Capture of RF television signals is an efficient and cost effective method of assisting broadcasters and receiver designers to better understand their reception environment. The RF signal capture program was initiated in March to create a signal library that will both assist broadcasters in better understanding their reception environments and help mobile device product developers improve their products.

The RF Capture Catalog is a collection of profiles that allow broadcasters and product developers to play back these profiles in the laboratory for more thorough analysis and evaluation of the Mobile DTV RF environment. Different captures of RF television signals will help broadcasters determine the relative performance between the two services and their expected coverage.

"We've recorded more than 290 different sequences, each about a minute and a half long and each at 'pedestrian' height and speed and also at the usual TV signal measurement of 30 feet off the ground. Our members and others will have access to these signals to both improve broadcast transmissions and help consumer electronics manufacturers design and test new products without the expense of on-site field trials. The Washington, D.C. RF captures are just the first step. Next, we're accumulating similar data in Texas and will make those broadcasts available as well," Schelle explained.

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About the Open Mobile Video Coalition

Representing over 900 TV stations across the country, the Open Mobile Video Coalition is a voluntary association of television broadcasters whose mission is to accelerate the development of mobile digital television in the United States. The OMVC is composed of 36 members that own and operate over 500 commercial television stations, as well as the Association of Public Television Stations, Corporation for Public Broadcasting and the Public Broadcasting Service, which represent an additional 360 public television stations. Membership in the OMVC is open to all U.S.-based television broadcasters. For more information, please visit: www.OMVC.org

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