Mobile Broadcast White Paper.
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Entertainment venue owners can exponentially intensify the experience for their fans by enabling them to view the action they otherwise wouldn't see from their seat. For the 2013-2014 college football bowl season, mobile innovator imediaReach, LLC, was called upon by the event organizers to deliver a unique, engaging, mobile-based fan experience for VIPs. This trial of imediaReachTV™, put HDTV streaming game broadcasts and replays on users' smartphones, a capability that can now be expanded to other venues. Gary Bonner, Chief Marketing Officer for imediaReach®, stated that "VIPs utilizing MELD-patented technology at the Russell Athletic Bowl and Capital One Bowl in Orlando, responded with sheer amazement at the experience."

The bowl games trials were done with full cooperation from the local broadcast engineer, and operated in conjunction with other wireless systems deployed at the event without issue.

Working directly with the event frequency coordinator allows us much more flexibility in Broadcasting. This allows us to guaranteed quality of service and the flexibility to be deployable with a guaranteed QOS or our service as well as others at the event. The amount of ambient RF noise increased greatly during game day. Fortunately, the MELD hardware had sufficient link-budget for proper reception in the desired areas

DETAILS

- Deployment: VIP area in the Florida Citrus Bowl
- Transmitter: MT300-AV
- TX Power: 14 dBm
- Single channel: SD resolution.
- Modulation: DVB-T (6MHz) QAM64
- Channels used: 25 (539 MHz) and 45 (659 MHz)
- Encoding format: MPEG2
- Devices served: IOS (4S, IPads), Android (Galaxy 4S, …)

Going forward:

Since this first beta deployment we have made improvements to modulation mode to optimize operation with our smart phone receivers. We shall also migrate to H.264 for future deployments, and increasing the sub-channel number. And of course the big change going forward is moving from our MT300-AV to the "F-class" transmitters with up to 4W of power emissions. The F-class is based on the commercially available MT300. Device shipment availability subject to completion of FCC certification.

At the core of this new product series is the MT300AVF white space transmitter that permits multiple HD channels to be accessed on mobile handsets. The MT300AVF transmitter, operating in compliance with FCC TVWS rules, can cover the entire venue and sets up in minutes to send multiple sub-channels of content in-venue over a single white space broadcast to an unlimited number of MELD receivers. The MELD (MTRXm) receivers are tiny, inexpensive brand-able tuner dongles which easily attach to Apple (IOS) and Android smartphones for 3-4 hours of uninterrupted multi-channel viewing. With television whitespace, the use of an intermittent Wi-Fi connection for video distribution is replaced with multiple, continuous, and high-quality HD video streams over television multicast.

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