

### **CASE STUDY**

"The 2006 FIFA World Cup represented an important milestone for broadcasters, such as the BBC. Not only was it one of the mostwatched productions of the year, but it was the first major event to be broadcast in both SD and HD," said Joe Zaller, vice president of marketing at Snell & Wilcox.

# BBC Uses Kahuna<sup>™</sup> to Provide Simultaneous SD/HD Coverage of the 2006 FIFA World Cup

Snell & Wilcox multiformat switcher enables easy integration of mixed formats and transmission in both SD and HD

# The Customer

The BBC provides a wide range of distinctive commercial-free programs and services for a mass audience. They include television, radio, national, local, childrens', educational, language, and other services for key interest groups. BBC services are accessed by over 90 percent of the UK population every week.

The BBC also runs orchestras, actively develops new talent and supports training and production skills for the British broadcasting, music, drama and film industries. The BBC is financed by a TV license paid by households. It does not have to serve the interests of advertisers, or produce a return for shareholders.

# The Challenge

To simultaneoulsy broadcast the 2006 FIFA World Cup, one of the most popular television events of the year, in both standard and high-definition formats from multiple venues across Germany.

# The Snell & Wilcox Solution

Kahuna, the world's first and only production switcher to enable simultaneous standard (SD) and high-definition (HD) operations on the same control surface and in the same mainframe.

Kahuna enables the user to integrate any SD video including live cameras, graphics or archives into HD productions, seamlessly, without the need for upconversion. It also allows HD material to be incorporated into SD productions without the need for downconversion.



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For live sports and music events, Kahuna meets the requirement for SD and HD outputs of the same program material. Kahuna makes it easy and cost effective to output simultaneous SD and HD versions of any program feed.

Operators can use captions, graphics, handheld shots, and archives without having to worry about the compatibility of formats or standards. No other switcher now available in the world can do this without outboard equipment.

With Kahuna, it is not necessary to upgrade a broadcast facility with all HD sources. There is no need for upconversion of SD material. Kahuna enables users to make the transition to HD gradually, extending the useful life of legacy SD equipment.

# The Results

The BBC used Kahuna switchers at facilities in Munich and Berlin to produce simultaneous SD and HD coverage of the World Cup. A 4 M/E (mix/effects banks) Kahuna in Berlin and 2-M/E unit in Munich, both provided and installed by GearHouse Broadcast, allowed the BBC production team and switcher operators to choose from a wide variety of sources - SD and HD cameras, VTRs, graphics systems, etc. - regardless of their format.

The Kahuna's unique FormatFusion technology enabled the seamless integration of SD sources into HD productions without the need for outboard upconversion.

"The 2006 FIFA World Cup represented an important milestone for broadcasters, such as the BBC. Not only was it one of the mostwatched productions of the year, but it was the first major event to be broadcast in both SD and HD," said Joe Zaller, vice president of marketing at Snell & Wilcox. "It was the ideal venue to demonstrate the unique capabilities of the Kahuna switcher."



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