New Channel Measurement Equipment by Fraunhofer IIS: Efficient Quality-of-Service Validation and Antenna Performance Analysis in the Field

The Channel Measurement Equipment (CME) is a flexible test receiver for up to 6 independent antenna signals for various frequency bands. Fraunhofer IIS showcases the CME at the CeBIT Bilişim Eurasia in Istanbul.

Careful network planning and the optimization of the air-interface parameters are essential for good coverage and high Quality-of-Service (QoS). With the new Fraunhofer Channel Measurement Equipment (CME), coverage problems can be solved. The real-time processing features and the powerful post processing tool-box allow the identification of coverage gaps or the verification of the overall service availability.

The CME provides 6 independent tuners with full synchronous processing of the signals. The CME is suitable for antenna diversity analysis, comparison of different antennas and supports carrier frequencies from VHF to S-Band.

Another advantage: The system is easy to control via an integrated touch screen display with soft keys or via network with remote desktop. All data are recorded on internal hard disk or external USB disk for further analysis. For easy verification of recorded data during field trials, the CME comes with an in-the-field analysis tool. A detailed post-processing tool chain for advanced signal analysis is available.

Additionally Fraunhofer offers training and support to the customer and provides expertise and personnel for carrying...
out individual measurement campaigns according to customer requirements. Several extensive field trials have been carried out already. Future measurement campaigns can benefit of this expertise.

The new Channel Measurement Equipment will be shown for the first time at the CeBIT Bilişim Eurasia, from October 6 - 9, 2011, in Istanbul, Turkey. The system can be experienced life at the Fraunhofer booth 3A-19/04 together with other technologies from Fraunhofer IAO and HHI such as a 3-D Display with electronic head tracking.

About Fraunhofer IIS
Founded in 1985 the Fraunhofer Institute for Integrated Circuits IIS in Erlangen, today with more than 750 staff members, ranks first among the Fraunhofer Institutes concerning headcount and revenues. As the main inventor of mp3 and co-inventor of the MPEG 4 AAC audio coding standard, Fraunhofer IIS has reached worldwide recognition. It provides research services on contract basis and technology licensing.

The research topics are: Audio and video source coding, multimedia realtime systems, digital radio broadcasting and digital cinema systems, integrated circuits and sensor systems, design automation, wireless, wired and optical networks, localization and navigation, imaging systems and nanofocus X-ray technology, high-speed cameras, medical sensor solutions and supply chain services.

The budget of more than 92 million Euro is mainly financed by projects from industry, the service sector and public authorities. Less than 25 percent of the budget is subsidized by federal and state funds.