

## **Research of MPEG4 Systems and their Implementation in DVB Technology**

The MPEG2 standard, as one of today's most commonly used image compression methods completed and accepted by the mid 90s, provides the baseband signal transfer background of the DVB technology. The requirements of the current multimedia applications go beyond the capabilities offered by MPEG2 systems. These needs are the driving forces of the development of the new MPEG4 standard worldwide. Our aim is to contribute to the activities related to this work by elaborating more efficient compression methods than the ones used in MPEG2, as well as to integrate these into DVB transmission systems. This provides a highly flexible and efficient background for program and data broadcast systems.

These challenges require an active co-operation between the two independent research groups located at the Media Technology Laboratory of the Dept. of Broadband Infocommunication Systems at the Budapest University of Technology and Economics: the Signal Processing Group shall be responsible for all innovations related to baseband data and image processing within the frame of MPEG4, while the Radio Frequency Group is to provide the digital RF transmission technology, i.e. the implementation of the MPEG4 developments into DVB-T broadcast technology.

Our one-year project addresses these challenges, aiming to expand the multimedia capabilities exhibited by the existing solutions.



