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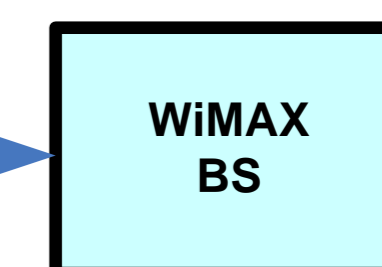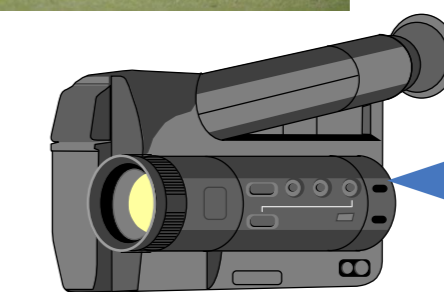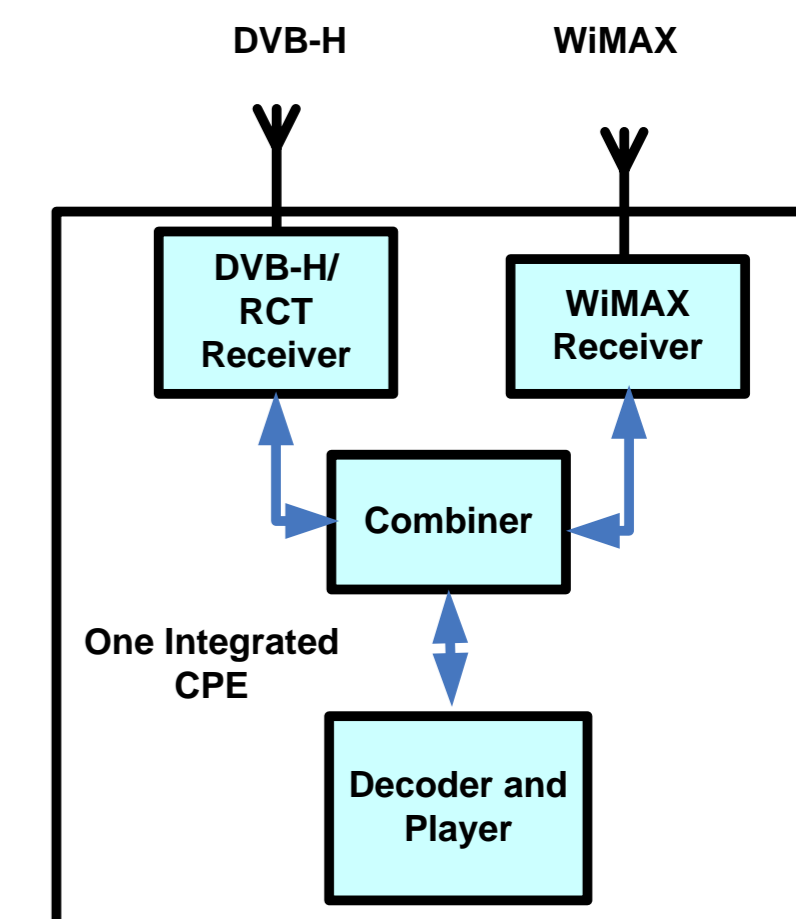Fax: +351 234 377901
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# SUIT

## Scalable, Ultra-fast and Interoperable Interactive Television

SUIT considers an end-to-end chain composed of a playout, last mile networks, and terminals of different computational and display capacities.

Firstly, video contents, either live or pre-recorded is encoded in a scalable way to be delivered simultaneously to a variety of devices from HD flat displays to handheld devices. Secondly, as the viewer expects that the interactive system responds to a request quickly, SUIT will optimally manage at the playout, the DVB-T/H and WiMAX resources, thereby, the requested content will be delivered as fast as possible through the available TDMA/FDMA slots in both networks. As SUIT is using scalable video contents, the playout system is able to increase, for short time, the bandwidth to support high priority contents, e.g. hyperlinked interactive video contents. Thirdly, scalable multiple descriptions, possibly unbalanced, are delivered through DVB-T/H and WiMAX in order to support high speed mobility.

To achieve the objectives related to scalable video, will make use of the most recent technologies like scalable MPEG-4 AVC/H.264 and MPEG-21 DIA. The former will allow encoding digital video contents in a scalable manner. In order to optimally meet the network conditions, joint source-channel-modulation schemes are being investigated. Finally, the latter will support terminal descriptions and negotiations between the terminal and the playout. Several reception profiles have been defined to support many practical scenarios as possible.