Abstract

Always user interaction has been one of the most crucial points when evaluating the quality of services. Mobile television is one of the most important services for the users. Problem of broadcast video streams encoded in scalable manner to enable heterogeneous mobile devices to render the most appropriate video sub-streams. Due to more than one layer channel switching delay and energy saving problem occur. For this purpose, we proposed a new video broadcast scheme for 3G mobile devices, where every layer has two parts for every TV channel, two part of every layer takes approximate half time to switch the next TV channel as compare to current broadcast scheme and reduce energy consumption. For the purpose of channel switching, we insert bootstrap in first part of every TV channel. Bootstrap is use to reduce the channel switching delay. Our extensive results confirm that the proposed schemes enable energy saving 0.0065 % observed and achieve less delay 129.0029 msec is possible with typical system parameters as compare to current broadcast scheme.

References

- Cheng-Hsin Hsu, Mohamed Hefeeda, &quot;Flexible Broadcasting of Scalable Video
Proposed Scheme for Scalable Video Broadcasting to Reduce Channel Switching Delay


- ETSI, Digital Video Broadcasting (DVB); DVB-H Implementation Guidelines,

Index Terms

Computer Science
Multimedia

Keywords

DVB  Digital Video Broadcasting—Handheld (DVB-H)  time slicing  handheld terminals
orthogonal frequency division multiplexing (OFDM)
multiprotocol encapsulation-forward error correction (MPE-FEC)