SPACE COMMUNICATIONS AND NAVIGATION SYMPOSIUM (B2)
Fixed and Broadcast Services (1)

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INTERACTIVE MULTIMEDIA SERVICES OVER HYBRID SATELLITE/TERRESTRIAL SYSTEMS

Abstract

The last decade saw the emergence of hybrid satellite/terrestrial systems for providing digital multimedia applications in different parts of world. These systems are built around use of satellite system for wide area coverage and supplemented by terrestrial transmissions in areas where satellite reception is blocked such as in high built up areas. These systems are designed to provide audio, video and data services to small terminals in fixed, nomadic and mobile environments. Addition of return channel capabilities considerably enhances not only the value of the multimedia services, but can be used to provide a variety of interactive services. The provision of return links can be through satellite or terrestrial wireless systems. Such interactive systems are gearing up to play a major role in providing innovative and vital information services to a vast majority of people in a cost effective way. This paper describes some of the existing and planned hybrid satellite/terrestrial multimedia systems and the ways in which the return channels are configured to provide interactive services. The paper specifically addresses design aspects of a system including its architecture and services which could considerably enhance the role of space based systems for digital mobile multimedia services.