SPACE COMMUNICATIONS AND NAVIGATION SYMPOSIUM (B2)
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ADVANCED BROADBAND COMMUNICATION-BROADCASTING CONVERGENCE SATELLITE

Abstract

Soon there will be no difference between ground mobile communication and satellite mobile communication according to the advanced satellite technologies including very large unfurlable antenna. Also Ka-band communication and broadcasting will bring the new services such as 3D realistic video services. More accurate and more various IT system will require more accurate time sync and position information. Maximum solar activities can affect all of terrstrial system including ubiquitous wireless communication system. All of these serivices will be available by only one large space system, named K-STAR. K-STAR has 6 different payload including S-band mobile payload for hybrid satellite and terrestrial service, satellite DMB payload, Ka-band wideband communication an broadcasting payload, L-band satellite navigationb payload and space environment payload. In this paper we will show how these payloads can corporate in one satellite and what kind of ground systems will be needed and what kind of new technologies will be used and how this system can be managed.