

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

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SATELLITE/TERRESTRIAL INTEGRATED MOBILE COMMUNICATION SYSTEM FOR SECURED
AND SAFE SOCIETY.

Abstract

To achieve a secured and safe society, the securing communication method at the emergency disaster is desired. In the background of this social tendency, the research and development of the mobile satellite communication system for the satellite terrestrial common terminal is begun. This system is called STICS (Satellite/Terrestrial Integrated mobile Communication System). The dual communication function that can be connected with both the terrestrial system and the satellite system is composed by using the common terminal with a handheld and portable shape. The main feature of this system is as follows. (1) Effective use of the frequency is attempted by sharing existing satellite system communication system with the terrestrial system. (2) The communication infrastructure can be secured by using a satellite system even when the ground system infrastructure is intercepted due to the disaster. (3) The dual mode terminal in the same size and weight as the ground cellular phone is achieved by installing a large-scale antenna of 30m class in the satellite. In this presentation, we will introduce research and development plan and fundamental result of STICS.