

THE USAGE OF SATELLITES IN THE TELECOMMUNICATION SPHERE

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A communication satellite is an artificial satellite stationed in space with the purpose of telecommunications. Modern communication satellites are used in a variety of orbits.

For fixed (point-to-point) services, communication satellites provide microwave radio relay technology complementary to that of communication cables. They are also used in mobile applications such as ships, vehicles, planes and hand-held terminals communication, and TV and radio broadcasting as well, where the application of other technologies is impractical or impossible.

Satellite systems operate in military, civil, commercial and industrial fields. They are able to transmit hundreds of thousands of separate simultaneous calls. These systems are being adopted for business communication, including the transmission of voice and facsimile messages, data and video data.

The first artificial satellite was the Soviet Sputnik 1, launched in October 4th, 1957 and equipped with an on-board radio-transmitter. The first American communication satellite was Project SCORE in 1958, which used a tape recorder for storing and transferring voice messages. Courier 1B, built by Philco, was also launched in 1960. It was the world's first active repeater satellite. With the launch of Alouette 1 in 1962 Canada became the third country to put a man-made satellite into space.

The new global satellite-communication systems offer next kinds of service:

The first one is voice messages. Satellite telephones are able to make calls from anywhere on the Earth to anywhere else.

The second service is messaging. Satellite messages have the same global coverage as satellite telephones, but they carry the text alone.

The third service is tracking. Voice and messaging systems also tell their users where they are to within a few hundred meters.

The fourth service is the satellite Internet. This can be very useful for those users who are in remote areas, and cannot access the broadband connection, or require high availability of services.

The fifth service is the satellite radio. Mobile services allow the listeners to roam a continent, listening to the same audio programming anywhere.

The satellite method of communication is the future of all kinds of telecommunication. The institutional initiatives and strategic thinking must allow for the preparation of a new generation of satellite communication systems. New technologies and services must be developed, demonstrated and tested.