Abstract

An integrated satellite-terrestrial network is integration of satellite network and the terrestrial network, providing global seamless, ubiquitous services of accessing to Internet. That is a major technological opportunity and challenge for the development of future network. Network access via satellites is one efficient way for achieving global connectivity, especially for remote areas where modern telecom infrastructure is hard to reach. However, the existing satellite networks and terrestrial networks are built independently and developed independently lack of overall consideration. In particular, the satellite networks and the terrestrial networks adopt different protocol architecture, which cause the difficulty to make the internetworking between satellite networks and terrestrial networks. Therefore, it is urgently needed to carry out the research of a new type of integrated satellite-terrestrial network architecture and its protocol system on the basis of the existing Internet architecture. In this talk, question is expected to focus on the study of applications, requirements, capabilities, architecture, networking mechanism, and other key enabling technologies to realize new IP networking for integrated space-terrestrial networking.