

ABSTRACT

Paper includes 94 pages, 17 images, 8 tables and 32 sources of information.

The purpose of this paper: analysis of available wireless transmission systems, description of ways to use the proposed network, description of cognitive architecture, calculation of energy efficiency of the satellite component and basic parameters of the terrestrial component on the example of the deployment of the proposed network in Ukraine.

Nowadays the world faced some troubles with the evolution in using of terrestrial mobile networks and faced the problem of efficiency of available networks. In the nearest future all available models of network deployment won't fit human needs in downloading and uploading of information using wireless connection as requirements to those networks are growing rapidly as needs in higher speed and capacity of those networks. The proposed work includes an idea on new architecture that will provide humanity with needed capacity with low power consumption and without huge money costs.

Key words: 5G, satellite, cognitive connection, terrestrial – satellite connection.