

## *ABSTRACT*

The work contains **93** pages, **28** figures, **5** tables and **30** sources have been used.

**Purpose:** to analyze features of creation and functioning of wireless sensor networks and flying sensor networks. To consider and develop an information collection point choice method on the flying sensor networks. Development of a technique of an assessment of indexes of efficiency of functioning of flying sensor networks which can be used for positional control of telecommunication aero platforms in the conditions of fast and unpredictable relocation of mobile subscribers.

**Research object:** the process of functioning of flying sensory networks with the use of telecommunication aeroplatforms.

**Subject of study:** methods for evaluating the performance of flying sensory networks with the use of telecommunication aeroplatforms.

### **Scientific research problems:**

1. To analyze the main features of functioning of the self-organized networks.
2. To analyze the principles of functioning of flying sensor networks with use of telecommunication aero platforms.
3. To research mathematical models of an assessment of indexes of functioning of flying sensor networks with telecommunication aero platforms, namely throughput and average delay of transmission between the given couple the sender-receiver

**Key words:** WSN, FSN, UAV, base station, throughput, mobile subscriber, telecommunication aero platforms.