## ABSTRACT

The diplomawork consists: 78 pages, 26 figures, 52 sources.

The purpose of this work is to analyze methods for building wireless 5G networks based on cloud technologies.

This paper discusses the basic principles of building wireless 5G networks, cloud networks, and building 5G networks based on cloud technologies.

## Work tasks:

1) Review and analysis of 5g wireless networks;

2) Review and analysis of cloud technologies (their varieties, structure, elements and capabilities);

3) Analysis of the possibility of building full-fledged 5g wireless networks using examples of existing theoretical and practical prototypes;

4) Summing up.

## Novelty:

As of 2019, revenues from traditional services do not cover the cost of everincreasing traffic across Telecom operators ' networks. The search for new services, i.e. "killer application" of traditional Telecom platforms usually does not give the expected results. Meanwhile, the main growth in traffic and revenue is not in the sector of people's devices, but in the sector of Internet of things devices, which is one of the basic goals of 5G functionality. Therefore, 5G networks can be considered one of the necessary components of digital transformation and the digital economy.

**Structure of the work:** the Work consists of an abstract, abstract, content, list of abbreviations, introduction of 4 sections (sections 1-3 of the theoretical review, section 4 analysis of the implementation of 5g networks based on cloud technologies)

Keywords: 5G; cloud technologies; 5G networks; wireless networks.