

# DESIGN OF TELECOMMUNICATION NETWORKS USING COMPUTER TECHNOLOGY

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It is no secret that in nowadays it is possible to accelerate the effectiveness of the educational process on the basis of computerized learning technology, which is a form of advanced education technology.

Computer is the most effective didactic tool in teaching special subjects. Telecommunication technology direction requires a complex communication line of telecommunication systems and networks. [2, p. 163] Experience shows that practical and experimental studies can not be used in computer technology other than computing the communication lines specified in the program of science within a time limit. In this discipline, students also carry out calculations.

Modern computer technology services can be utilized to improve the efficiency of teaching telecommunication systems and networks. The use of Google Earth to get the location of objects in their telephone projects. It is possible to prepare the Communication Line projects and "Tablets" with the help of "Adobe Photoshop" or similar software. When using the above-mentioned programs, the student can perform the following tasks [3, p. 95-100].

1. Get the pace for the project at different heights, real zoom, coordinate position (Google Earth has this option).

2. Create a cable drainage project using the "Adobe Photoshop" software, draw trunk cable lines (downgrading conditional signs on a chart without difficulty, eg ATS, cabinets, cable boxes, distribution boxes, cable wells, etc.).

3. The relevance of the project to the actual situation and the use of computer technology in the project increases the interest of the student to his / her work (the project will be able to get the student's residence), [1, p. 251-257].

Students can use topographical maps of cities or towns where they are ready to work on project work. In this case the student can perform the following tasks in his project:

1. In the given project, the recoating works can be done by selecting the nearest cable tracks and places where cable laying is not possible, performing the requirements of laying the cable sewer pipes, choosing the wells in the corridors and streets.

2. Due to the rapid application of the graphic software and the low demand for paper products. The ability to save the project to a file in a hidden file.

The capabilities of the Google Earth software and Adobe Photoshop or similar programs reduce the cost of the project and the appearance of the project, which is well studied. [1, p. 269-271] Drawing schemes using the Adobe Photoshop software are shown in figures 1, 2, 3, 4, 5.

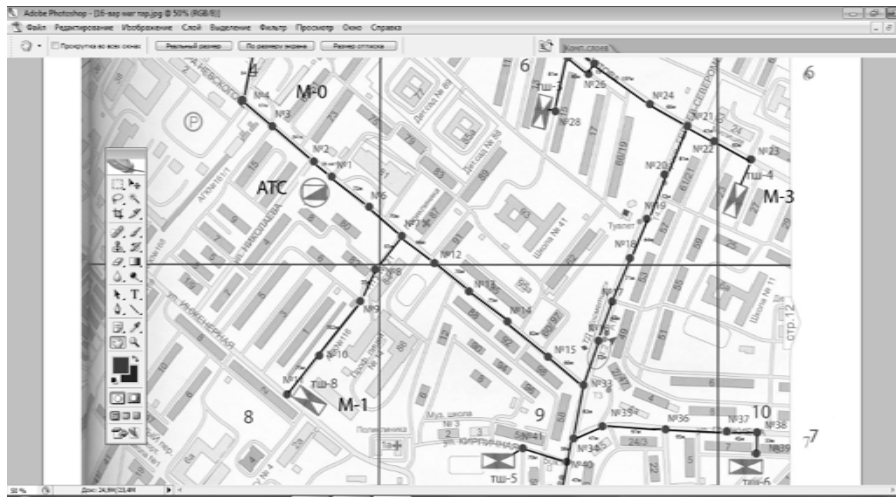


Figure 1. Fragment of the town's microcosm of the city, divided into skeletal regions.

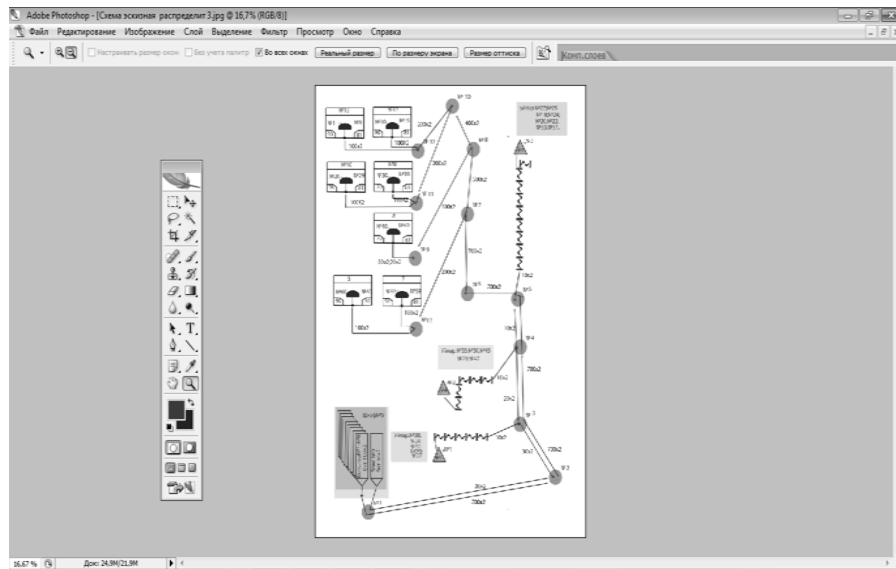


Figure 2. A sketch scheme of a distribution network belonging to a closet.

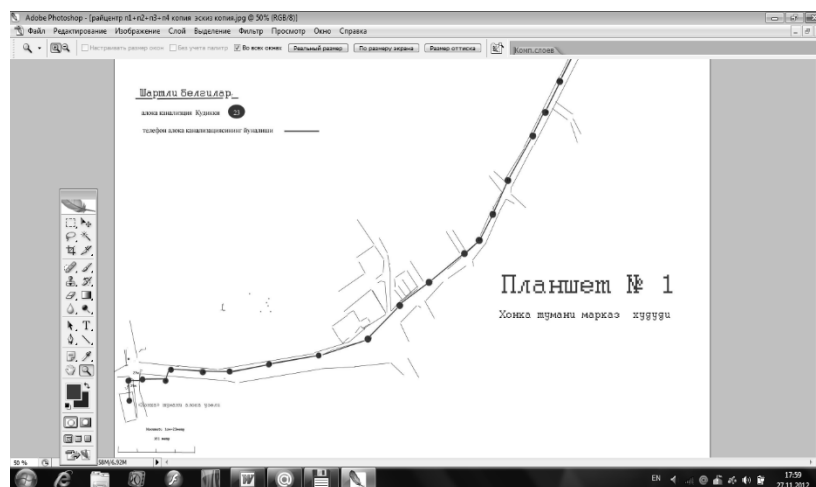


Figure 3. A picture of a cable-sewer trunk in the form of a "Tablet" from the photo paper.

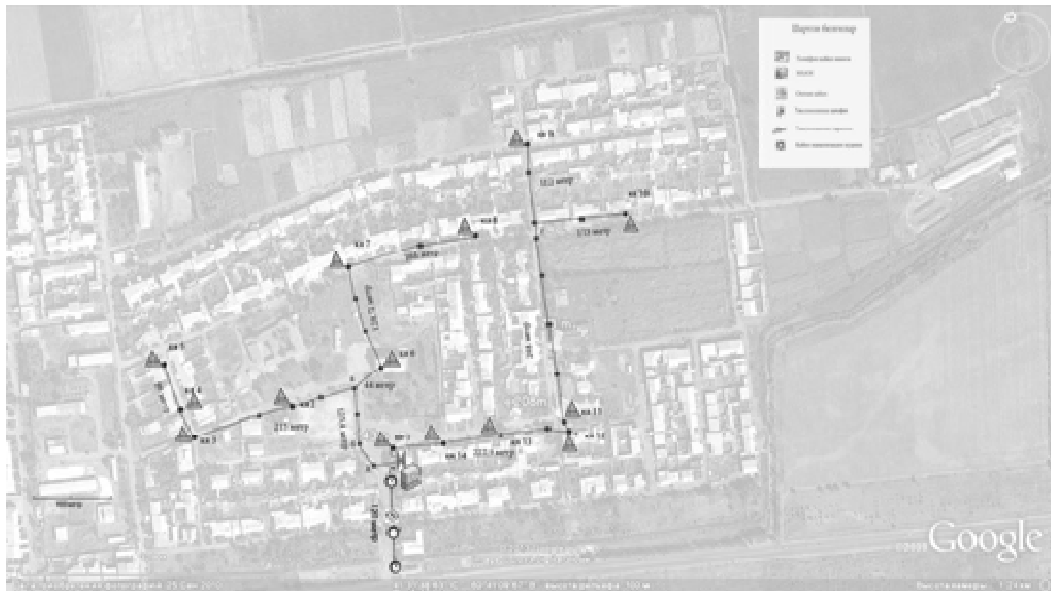


Figure 4. Drawing area with mounted MSAN equipment.

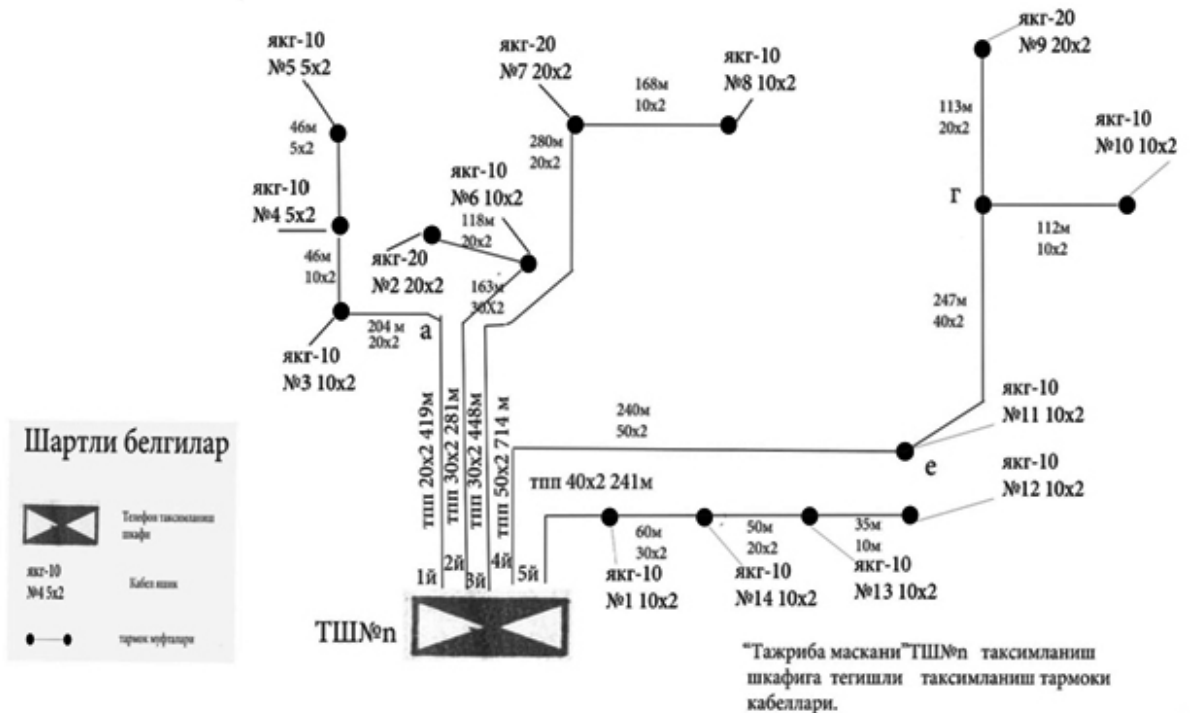


Figure 5. Sketchpad Sketch Chart.

By doing this, students are expected to have a real interest in the project and their use of computer technology in the project "Telecommunication Systems and Networks" will increase the interest of the student to his / her work and make the project faster and easier to understand.

### References

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