

## MODERN MEANS OF TELECOMMUNICATION AND COMMUNICATIONS

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**Abstract.** *In this article, modern means of telecommunications and communication are considered radio, optical, or other electromagnetic systems that transmit signals, symbols, texts, images, sounds, or other types of information.*

**Keywords:** *signals, signs, texts, images, sounds, information, conductive, radio, optical, electromagnetic. tele"- distant, "communication"- contact, message.*

### СОВРЕМЕННЫЕ СРЕДСТВА ТЕЛЕКОММУНИКАЦИЙ И СВЯЗИ

**Аннотация.** *В данной статье современными средствами телекоммуникаций и связи считаются радио-, оптические или другие электромагнитные системы, передающие сигналы, символы, тексты, изображения, звуки или другие виды информации.*

**Ключевые слова:** *сигналы, знаки, тексты, изображения, звуки, информация, проводящие, радио, оптические, электромагнитные. теле"- дальний, "связь"- контакт, сообщение.*

### INTRODUCTION

"Telecommunications means the transmission, reception, processing of signals, signs, texts, images, sounds or other types of information using wire, radio, optical or other electromagnetic systems." Broadly speaking, telecommunication is communication between entities (people, equipment, computers) at a distance that cannot communicate directly with each other. ("tele" - distant, "communication" - contact, message). For example: exchange of light signals between ships, telegraph, television, telephone, etc. The development of computer telecommunications began long before the origins of the Internet and Windows. Communication or "telecommunication" refers to the exchange of information between a source (transmitter) and a receiver (receiver) at a distance. Telecommunication means - technical devices, equipment, structures and systems that allow generating, transmitting, receiving, processing, switching and controlling electromagnetic or optical signals.

### MATERIALS AND METHODS

Verbal communications occur during verbal communication between employees in their workplaces and learning environments, as well as outside over telephone networks. The telephone is an important means of oral communication and has been in use since 1878. Since then, it has significantly changed its functions. In the office, the phone plays two roles: - provides oral communication; connects a number of technical means of the enterprise with remote subscribers. The functions of a modern telephone are many: it is an answering machine, determines the number of the calling subscriber, protects the phone number from being found out, etc. Memory and control units are integrated into it. If the phone is equipped with a radio receiver, it can work wirelessly and move from place to place within the office. And finally, the mobile phone has real mobility, because it allows you to talk to the subscriber from the car, ship and plane. For this purpose, "cellular" communication is widely used. The normative value of a

paper document is an important component of justice. Humans have the ability to work with paper. Therefore, paper messages cannot be superseded by paperless messages.

### RESULTS

There are many ways to send paper messages. In this, simple telegraphic communication has become teletype communication. Another developed tool is telefax communication. Facsimile (from Latin - facsimile, create a likeness) - reproduces the original document as if it were a copy. In this case, it is changed by scanning the message elements in transmission. The receiving apparatus receives successive signals from the line and converts them into an image on paper. A reader is used to extract the text from the paper medium. Copying documents in the office with the help of xerox has become popular. Electronic information flows. The electronic office receives a lot of messages from various sources near and far. In turn, the office staff transmits its information messages to the outside world. Therefore, the office has tools designed to receive and transmit electronic information flows. Paper messages arrive over the fax network. Various verbal messages are input or output to the computer using special "switches". Electronic messages are input or output to a computer through a local or global network using a modem. In the office, computers process information flows and perform integration tasks. Email. E-mail uses electronic methods to send and process correspondence received by computers. It is possible to receive documents, tables, graphs, drawings, pictures and photographs, diaries, windows, verbal messages through it. The sender of the message uses a special e-mail program. Messages are sent to a special email box. The server sends a message to the addressee's mailbox about the arrival of a letter to his address.

E-mail is a paperless mail, which is connected to a computer with a telephone network, e-mail - mail, telegraph, facsimile communication features, and due to its speed, it offers completely new information services. For example: on conducting public teleconferences. This is a simultaneous exchange of information between team members. Various issues will be discussed in this conversation. This means communicating through written texts. "Telex" is an information exchange system. This information system allows you to automatically prepare and transmit huge streams of information to different subscribers. In this system of text preparation, the array of information transmitted using terminals equipped with high-quality displays is stored in the computer memory. Then the array prepared using special data transmission devices is sent to or received from the subscriber. Television news streams. Television entered life as remote viewing and became a mass phenomenon. More than 4 billion television receivers are used in the world. Television is a very complex information device. The idea of watching TV is as follows: - transforms image elements into a sequence of electrical signals by changing them (image analysis); - they are transmitted through communication channels to the receiving point, where the reverse conversion from points to a moving image (image synthesis) is performed. This theory was developed by the Portuguese scientist A. Di at the end of the 20th century. Paiva and developed by the Russian scientist P. N. Bekhmetev. V. K. Zvorkin and F. Fransworthy (USA) are associated with the development and use of practical solutions. Political, cultural, scientific, social, economic information is provided through television

### DISCUSSION

The next stage of television is interactive television based on digital television technologies.

"Telematn" information system. "Telematn" information system is created to transmit current information that is always interesting for many groups of users. "Teletext" is an "electronic newspaper" or "electronic bulletin" that continuously transmits text pages from newspapers, magazines, agency services. Features of this system: • collected by a station that transmits news sheets continuously and sequentially, transmitted to the air with ordinary television signals or via cable; • "teletext" information is continuously updated; • an additional device is needed for the TV to mark the page of the necessary information; • browsing user electronic newspaper pages, • skip sections, • can go back to read pages, record on VCR. But it cannot change the text content. "Videotext" information system. This information system expands the possibility of receiving information and freedom of choice, as well as combines the possibilities of telephone, computer, and television. Summary: The core of telecommunication is the telephone network XX the two main types of communication of interactive services in the century - telephone and telegraph services were carried out. Telegraph communication is slowly becoming a thing of the past is becoming a means of communication, but telephone communication has taken its place important places in the market of infocommunications services continues to occupy. In other words, in the world globalization of telecommunications is taking shape, a new generation of communication is rapidly entering.

### CONCLUSIONS

The qualitative development of telephone communication in the 21st century is based on the following directions is carried out:

- Completing the transition to digital methods of information transmission and switching;
- Scope of services provided to subscribers of the telephone network increase;
- Bandwidth in the main elements of the telephone network maximize;
- Expansion of network access and various technical tools use it for construction;
- Indicators of quality of service and data transmission increase;
- Effective technical operation to ensure stable operation of communication use methods;
- The most important thing is to reduce the cost of construction of telephone networks, development of the network and provision of technical services.

### REFERENCES

1. V.N. Capteilin. "Computer and training: the psychological and pedagogical problem of computer training. Round table// Question of psychology". -1987. #1. S-60-88.
2. A.A. Abdukadirov. "Theoretical intensification of preparation for uchiteley physical-mathematical discipline". "Aspect of the use of computer resources in the educational and educational process// dissertation on the application of the doctoral degree in pedagogical science". - Tashkent, 1990.
3. U. Yuldashev, M.E. Mamarajabov, K.A. Mirvalieva. POWER POINT 97: tutorial. - T., 2001. - 32 p.
4. M.H. Lutfullaev., M.A. Fayziev. "Basics of the Internet", SamDU publishing house. 2001.
5. B. o'. Kadirov. U. Begimkulov, A.A. Abdukadirov. "Information technology". Electronic textbook. 2002.