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## **Current Digital Communication**

We are living in the information age. And this age offers a great number of opportunities than ever. Time is changed and technology is developed with huge rate.

The main factor of 21 century is speed, that is, the speed of obtaining and transferring information. To keep a finger on the pulse of events and forecast forthcoming changes it is required radically improve information streams.

Only yesterday we used stationary large-sized telephones with disk and digital panel and were “tied” by long telephone cables to the place of their location. Today everyone in the globe has his own telephone with palm size which guarantees connection at any place. This small unit combines functions of telephone and many other multimedia functions with improved quality of voice. What will happen tomorrow?

Improved technology will be tomorrow. It is IP-telephony!

This technology is used for transferring voice information. It successfully connects two different worlds – the world of telephony and the world of Internet. Until recently they existed independently and were used for different purposes. Everything has changed now.

Possibility to deliver voice diagram through packet networks of data transfer predetermined further direction of telephony development.

IP telephony is partly based on current networks of fixed telephone lines. But it applies technique of voice signal compression and completely uses capacity of telephone lines.

IP telephony is a new technology directed to transfer voice digitized and compressed with the help of digit methods through networks built on Internet technique. It enables to cut the cost of long distance calls. Disadvantage is the problem of signal delay connected with peculiarities of IP technology. For instance, well-known specialized program Skype made IP technology readily available. However it is not free.

General principle of operating telephone servers of IP telephony is following. From one side server is connected with telephone lines and can be connected with any telephone in the world. From the other side server is connected with Internet and can be in touch with any computer in the globe.

Units for current IP telephony offers a great number of functional capabilities and enables to solve problems concerning voice quality. This feature makes it commercially attractive.

Real-time technology is currently developed. It allows to realize telephone conversations and videoconferences in IP networks. RTP is one of these protocols.