

## ORGANIZATION OF TELEWORKING VIA VPN TECHNOLOGY

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The COVID-19 pandemic has globally imposed a number of restrictions on population interaction. Among these measures, one can be noticed everywhere - social distancing.

Taking into account the fact that this leads to the impossibility of carrying out the current activities, in many fields of activity the remote work became actual. Teleworking was before the pandemic, it was even provided for a long time in the labor code in our country.

Although it was popular mainly in the IT field, it was taken over and adapted in many fields of activity. Today, practically, the economic activities that implemented teleworking can afford to hire an employee who is far from their location [1-2].

**The purpose of the report is** to analyze a technical solution for secure remote user operation using tunnelling technologies in computer networks.

One of these solutions is VPN technology - a virtual private network [3]. Through this tool, the data transferred through the Internet are encrypted at a low level over the entire course of them through the Internet communications nodes.

Once arrived at the destination, the data is decrypted by the destination system, this being the only system in the world that holds the decryption key.

### References

1 N. Kuchuk, O. Mozhaiev, M. Mozhaiev and H. Kuchuk, «Method for calculating of R-learning traffic peakedness,» 2017 4th International Scientific-Practical Conference Problems of Infocommunications. Science and Technology (PIC S&T), Kharkov, 2017, pp. 359-362.

2. Kuchuk G. Resource-Oriented Approaches to Implementation of Traffic Control Technologies in Safety-Critical I&C Systems / G. Kuchuk, V. Kharchenko, A. Kovalenko, A. Shamraev // Green IT Engineering: Components, Networks and Systems Implementation. Studies in Systems, Decision and Control series. Kharchenko, V., Kondratenko, Y., Kacprzyk, J. (Eds.). Springer International Publishing Switzerland, 2017. 355 p. Chapter 15 – Pp. 313-337. ISBN 978-3-319-55595-9, DOI: 10.1007/978-3-319-55595-9.

3. Ткачов В.М. Аналіз методів забезпечення відмовостійкості оверлейних мереж / В.М. Ткачов, К.П. Гвоздецька // Проблеми інформатизації : тези доп. 8-ї міжнар. наук.-техн. конф., 26-27 листопада 2020 р., м. Черкаси, м. Харків, м. Баку, м. Бельсько-Бяла. Т. 1 / Черк. держ. технолог. ун-т [та ін.]. – Харків, 2020. – С. 44.

4. Tkachov, V., Bondarenko, M., Ulyanov, O., & Reznichenko, O. (2019, December). Overlay Network Infrastructure for Remote Control of Radio Astronomy Observatory. In 2019 IEEE International Conference on Advanced Trends in Information Theory (ATIT) (pp. 161-165).