

SibFU scientists development will make Internet more accessible for Northern regions

Scientists from the School of Engineering Physics and Radio Electronics of Siberian Federal University in cooperation with NPO "UST" Ltd. have created an antenna array, which will provide telephone service and Internet connection to the remote Northern regions of Russia.



The antenna array will be an integral part of the new mobile satellite communications stations of JSC "NPO Radiosvyaz" intended for satellite broadcasting in Ka and Q bands.

According to Professor Yuriy Salomatov, Deputy Director of Science in the School of Engineering Physics and Radio Electronics, this development will be very helpful for detached and Northern regions with no satellite communication and ground stations. Ka and Q bands have larger information capacity incomparison with C and Cu bands, used in Russia. This will help to provide the necessary communication for new users. Today Russia has no substitutes for mobile stations in Ka and Q bands. **By 2020, it is planned that users of the new mobile satellite system can be provided with telephone communication and Internet access anywhere in Russia.**



"The main advantages of antenna arrays of Ka and Q bands are small size and the possibility to use the arrays in motion, which make the transportation and installation of the equipment easier for stationary use and when moving", emphasized **Roman Ryazantsev**, post-graduate student of the Department of Radio Engineering, main researcher and developer of the antenna array.

In addition, the development is supported by the Regional Science Foundation as a part of the competition of scientific and technical projects aimed at cooperation of institutions and organizations of the scientific and educational complex of Krasnoyarsk Krai by 2017 Order of Industrial Enterprises. "NPO Radiosvyaz" ordered the development and implementation of the project.

25 april 2018

© Siberian federal university. Website editorial staff: +7 (391) 246-98-60, info@sfu-kras.ru.

Web page address: <https://news.sfu-kras.ru/node/20288>