WHAT IS RADIOSPACE



RadioSpace: Ireland's National 5G Test Centre is the country's most advanced facility for R&D activities for radio and wireless technologies needed for 5G and the Internet of Things. Based at Maynooth University-located 25 km outside of Dublin, Ireland-RadioSpace provides a unique, large-scale, interference-free facility for scientists and engineers from industry and universities in Ireland and internationally.

It consists of a state-ofthe-art shielded chamber, advanced test equipment and includes access to specialist engineers. RadioSpace connects industry and academic researchers, with the aim of addressing the full range of challenges in developing new technologies and products for the next generation of wireless devices. The National 5G Test Centre is a unique combination of state-of-the-art equipment and research excellence. It draws upon the expertise of CONNECT - the world leading Science Foundation Ireland Research Centre for Future Networks and Communications and Maynooth University's researchers in the Department of Experimental Physics and the Hamilton Institute.

RadioSpace received the financial support of Science Foundation Ireland (SFI) under Grant Number 15/ RI/3225 and 16/RI/3399.

"The unique capability provided by the National 5G Test Centre at Maynooth University, especially in the mmWave band is currently lacking in the country and this world-class facility will be very valuable. The resulting expertise and outflow of experienced researchers will help to support existing Irish design houses and attract new investment."

John McAuley, CEO, Compliance Engineering Ireland

For more information on the use of RadioSpace contact:

Email: Radiospace@mu.ie Telephone: +353-1-708 6329 www.maynoothuniversity.ie/ radiospace Located at Maynooth University Maynooth, County Kildare, Ireland

"As one of the world-leading

industrial research labs.

we as Nokia Bell Labs are

state-of-the-art facility at

Maynooth University. This

is a great opportunity for

Ireland to take leadership

in the development of 5G

RF-Transceiver Research,

Nokia Bell Labs, Dublin

technologies."

Dr. Florian Pivit,

Department Head,

very excited about this new,







RADIO SPACE

CONNECT

Ireland's National 5G Test Centre

> Maynooth University

RADIOSPACE SERVICES

OUR RESEARCH EXPERTISE

RadioSpace is designed to provide a full range of services to developers of 4G mobile networks, IoTenabled products and future 5G and mmWave devices. Our services include:

 Device characterisation from 1 GigaHertz to 1.1 TerraHertz

- Antenna characterisation
- Over-the-air signal and protocol testing
- EMI/EMC testing and characterisation
- Spectral Mask compliance
- RF Design and Debug services

For small- and medium-sized companies, access to our services can be facilitated via the Enterprise Ireland Innovation Voucher scheme. Assistance can be provided to help use this scheme. Within Maynooth University, our researchers have developed world-class expertise in radio physics, transceiver technologies and the use of wireless systems for communications in terrestrial, aerial, space and marine domains. We are a leading partner in the CONNECT Centre and work extensively with industry. Select areas of research expertise include:

- Wideband RF transceivers for 4G, 5G and mmWave Infrastructure Systems
- High-efficiency digital power amplifiers
- Novel communication
 waveforms and network
 architectures
- Terrahertz radio physics
 and technologies
- IoT enabled technologies for cities, buildings, and the environment
- Specialist wireless links for rural areas, space, air and sea

CONNECT is the worldleading Science Foundation Ireland Research Centre for Future Networks and Communications. CONNECT brings together worldclass expertise from 10 Irish academic institutes to create a one-stop shop for telecommunications research, development and innovation. CONNECT engages with more than 35 companies, including large multinationals, SMEs and

start-ups.

CONNECT Centre for Future Networks

> **Research at CONNECT** is inspired by the desire for open communication systems that enable multiple services providers to share network resources as they compete to satisfy the demands of a diverse set of end users. Its research programme is focussed on low energy networks, shared networks. network convergence, dense and mobile network infrastructure, and frontier network technologies.

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