<u>News story: £80 million funding boost</u> will help Scottish universities and <u>businesses develop 'quantum'</u> technology that could help save lives

- The Chancellor, Philip Hammond, will provide £80 million over five years to develop technology that could help in search-and-rescue missions, hostage situations and aid firefighters in saving more lives.
- Quantum imaging technology could be used to provide high-quality x-ray images and could also be fitted to cars to help drivers see around corners.
- Glasgow is an internationally leading centre for quantum imaging research and the Chancellor has confirmed that the University of Strathclyde, University of Glasgow and partner institutions will continue their cutting-edge research.

More than £80 million over five years will be given to four world leading development centres to create technology that could help save more lives in search-and-rescue missions, hostage situations and help firefighters tackling a blaze, the Chancellor has announced.

In future quantum imaging technology could be used to help emergency services get a more accurate, live and high-quality image before embarking on rescue attempts. The technology will also be used to see through snow storms, around corners and map hidden underground hazards.

On a visit to the University of Strathclyde, Chancellor of the Exchequer, Philip Hammond said:

The UK is a world leader in Quantum technologies, but others are investing hard to catch up with us.

The £80 million in new funding, that I have announced today will ensure that we remain at the forefront of this exciting technological revolution.

Technological leadership boosts our economy and our productivity, meaning higher growth and higher wages.

Digital Secretary Jeremy Wright said:

Quantum computing promises to transform our lives and solve problems that today's computers are unable to address.

Thanks to our National Quantum Technology Programme and this new funding from government we are extremely well placed to pioneer this groundbreaking innovation.

Chief Executive of UK Research and Innovation, Sir Mark Walport, said:

Quantum Technologies hold great promise for the UK. Researchers at our Hubs are already exploring new methods for more accurate measurement and sensing, expanding the power of computing, and making communications quicker and more secure.

This new funding for the UK National Quantum Technologies Programme will provide reassurance to the research base and the industries in the field that the UK is serious about being a world leader in the field and is investing long term.

Subject to approvals, the funding will give certainty to leading researchers and students, and help attract more investment and jobs to the local area. Science, research and innovation is at the core of our modern Industrial Strategy, and the government has outlined its ambition to raise private and public sector investment in R&D by 2.4% by 2027.

Developing quantum has been identified as a future technology which forms a key part of the government's modern <u>Industrial Strategy</u>.

Other centres which will benefit will focus on:

- Quantum Computing and Simulation Hub, currently led by Oxford, which focus on computers which will trivially solve complex problems which currently stump our most advanced supercomputers
- Quantum Sensing and Metrology Hub, currently led by Birmingham, that will revolutionise mining and excavation processes through precise mapping of densities and distances
- Quantum Communications Hub, currently led by York, is developing secure communications methods which will keep financial transactions and data transmissions safe from interception

While in Glasgow the Chancellor also announced at least £25 million be made available to UK industry to develop next generation (5G) mobile technology in specific sectors of the economy.

Bids are encouraged for funding process led by DCMS.

Next generation digital infrastructure is a key part of the government's modern Industrial Strategy, providing faster and more reliable connections for business and people.

The UK government is determined to make the UK a world leader in 5G so the government can take advantage of the huge economic benefits that this new technology offers.