

New measures to boost UK telecoms security

- Forms part of UK's £50 million package to boost innovation in mobile network technology
- The measures are a key step in providing nationwide security and resilience
- Comes as Nadine Dorries travels to the US to discuss future cooperation on telecoms, tech and data with US counterparts

2G and 3G mobile networks [will be phased out](#) of use in the UK by 2033 as part of measures to increase the security of telecoms supply chains and to support a smooth transition to faster mobile networks.

Digital Secretary Nadine Dorries announced the ambition, alongside £50 million of telecoms research and development projects, ahead of her first visit to the United States where she will meet with US Secretary for Commerce Gina Raimondo.

The leaders will renew their commitment to diversifying the global telecoms supply chain and discuss shared ambitions and co-operation on transatlantic data policy. The Digital Secretary will meet with several senior ministers and officials on the four-day visit to Washington DC and New York to build cooperation on her digital and tech priorities.

The announcement follows the UK's decision to ban Huawei equipment from 5G networks and the recent introduction of the [Telecommunications Security Act](#). It forms part of the government's [£250 million strategy](#) to build a more competitive, innovative and diverse supply chain for telecoms, to reduce the world's over-reliance on a few equipment makers. The UK and the US are united in their mission to resolve this global issue.

The government has agreed (see notes to editors) with the UK mobile network operators (MNOs) Vodafone, EE, Virgin Media O2 and Three that 2033 will be the date by which all public 2G and 3G networks in the UK will be switched off.

The plans will free up spectrum – the radio waves used for sending and receiving information – to allow for the mass rollout of 5G and other future networks such as 6G which will help create huge possibilities for people's lives. These technologies will help power driverless vehicles and drones, immersive virtual and augmented reality experiences, as well as innovations in tech to achieve Net Zero and improve healthcare. The hyper-fast speeds of 5G will also revolutionise internet accessibility on the go.

The government's £200 million [5G Testbeds and Trials programme](#) is already seeing next-generation networks transform industries – from smart farming to immersive reality experiences to enhancing the UK's top tourist destinations and 5G buoys helping coastguards save lives at sea.

Digital Secretary Nadine Dorries said:

5G technology is already revolutionising people's lives and businesses – connecting people across the UK with faster mobile data and making businesses more productive.

Today we are announcing a further £50 million to put the UK at the forefront of mobile connectivity and to make sure our telecoms networks are safe and secure now and in the future.

We can only do this through stronger international collaboration and I will be meeting with our US allies today as we strengthen our ties on technology.

In the next step in the tech revolution, the government and MNOs are also announcing new plans to boost innovation and accelerate the rollout of a new wireless communication technology known as Open Radio Access Networks (Open RAN), which enables mobile networks to be built using a variety of different equipment suppliers.

Open networks can feature components from multiple suppliers within one mast site or allow for components to be exchanged or used as replacements at masts that, until now, have been kitted out by a single supplier.

The new plans include a joint ambition for 35 per cent of the UK's mobile network traffic to be carried over Open RAN by 2030, £36 million in funding for fifteen projects to trial the technology across Scotland, Wales and England, and a £15 million cash injection for the SONIC prototype testing facility for next-generation telecoms tech.

Nadine Dorries will also meet with Director of the White House Office for Science and Tech Policy Dr Eric Lander today. They will discuss strengthening ambitions for the US-UK Technology Partnership which aims to foster collaboration on shared challenges across a range of issues including online safety, data and digital competition.

She will also speak at a reception at the UK Ambassador's Residence in Washington attended by a selection of digital, tech and cyber stakeholders from the US administration, think tanks, Congress and UK government. She will promote the upcoming UK National Cyber Strategy which will strengthen the country's collective security and defend a free, open, peaceful and secure cyberspace.

Further information

Sunsetting 2G and 3G

A current barrier for new suppliers entering the UK's 5G market is that they must, as it stands, offer 2G or 3G services because they are required by all four domestic mobile operators. Setting out a timeline for winding down these services follows recommendations from the [Diversification Taskforce](#) and will

allow new suppliers to enter the market by giving them certainty on when they can start work building 5G networks across Britain.

There are wider benefits including reducing the power needed to run multiple networks, being able to reuse spectrum and retiring old kit. It also makes running networks simpler as operators do not have to handle the challenges which arise from managing up to four networks, and even more as we move towards 6G.

Some individual operators will switch off their networks, particularly their 3G networks, earlier than 2033, and will announce their own plans on timing. The number of consumers using 2G and 3G who will need to upgrade is expected to be very low by 2033, and operators have committed to help customers transition to newer network technologies.

Hamish MacLeod, Director of Mobile UK, said:

Mobile UK and its members welcome the government's statement. Switching off 2G and 3G will enable operators to transition fully to more energy efficient and high capacity networks to the benefit of customers. We are also working with government and wider industry to support the maturity of new RAN solutions to open up further opportunities for innovation and new services in the future.

Future RAN Competition

It comes as the government reveals the winners of its £36 million competition to fund innovative R&D projects across the UK to develop open RAN technology.

The 15 winning consortiums in the Future Radio Access Network Competition (FRANC) will develop technical solutions – such as radio transmitters, signal processing equipment, power management systems and the software – required to roll out open RAN solutions across the UK quickly and attract new home-grown telecoms suppliers to the 5G supply chain.

In a boost to levelling up, the investment will be spread across the UK, including Glasgow, Cardiff, Cambridge, Newcastle, Newport, Slough and Ebbw Vale.

Matthew Evans, Director of Markets at techUK, said:

Today's announcement of the successful FRANC bids is testament to the role our tech and telecoms sector can play in preparing and empowering the UK's networks for future prosperity and security. It is a clear indication of the talent, expertise and innovation the UK can offer the global telecoms market.

While more can be done to accelerate the commercialisation of UK innovation in advanced connectivity, opportunities like FRANC show

the willingness of our tech companies, SMEs and academic community in helping deliver the long-term aspirations of secure, resilient, open and disaggregated networks.

SONIC Labs

The government is also announcing a cash injection of up to £15 million for [SONIC Labs](#) – a test facility based in London and Brighton and run by Digital Catapult with the support of Ofcom to enable telecoms suppliers to test their early stage products in real-world mobile network settings.

SONIC Labs opened in June 2021 with an investment of £1 million. The extra £15 million will be invested so the Lab can expand its programme of testing and international engagement. The new FRANC winners are expected to work closely with the labs.

Joe Butler, Chief Technology Officer at Digital Catapult, said:

Diversification and interoperability are key themes driving UK capabilities in advanced digital technology and we are pleased to expand Sonic Labs' role in delivering fast, secure and reliable connectivity.

We look forward to expanding access early next year to our testbed network to companies looking to experiment with and test new products and services. Today's announcement will help us reach more businesses to prepare them for the digital future.

ENDS

Notes to editors

- Last week both the UK and US endorsed the Prague Proposals on Telecommunications Supplier Diversity, which highlight the importance of working together on research and development with international partners to achieve open and interoperable networks.
- The MNOs are currently taking forward plans to introduce and expand their 5G networks as well working to extend 4G coverage to the most rural parts of the UK. Therefore the 35 per cent ambition is not a mandate and the government will continue to actively support operators and the wider telecoms industry to develop the technologies needed to meet this ambition.
- The investment figures in SONIC and FRANC are subject to the signing of grant funding agreements.
- Full details on the individual FRANC winners have been published [online](#).