

## Briefing for the Public Petitions Committee

**Petition Number:** [PE1753](#)

**Main Petitioner:** William Mercer

**Subject:** Moratorium on the roll out of 5G technology

Calls on the Parliament to urge the Scottish Government to support the recommendation for a moratorium on the roll-out of the fifth generation, 5G telecommunications technology until potential hazards for human health and the environment have been independently reviewed.

### Background

This petition seeks a moratorium on the roll out of 5G and asks the Scottish Government to engage with the World Health Organisation (WHO) to challenge their safety guidelines. The petition cites two articles; '[Peer Review of the Draft NTP Technical Reports on Cell Phone Radiofrequency Radiation](#)' and '[Scientist Appeal for 5G Moratorium](#)'.

### 5G in Scotland

5G mobile networks have already launched in some cities in the UK. [EE launched its network in Edinburgh on 30 May 2019](#), O2 expect to launch their 5G network in the city in October 2019, and Three plan to follow before the end of the year. [Vodafone have launched their 5G network in Glasgow](#), with other providers planning to follow by Summer 2020. Note – these early deployments only cover part of the cities.

[5G RuralFirst](#) are currently trialling 5G technology in the Orkney Islands (as well as other rural sites across the UK.)

### Public Health in the UK

In the UK, Public Health England's Centre for Radiation, Chemical and Environmental Hazards (CRCE) have issued advice that exposure to radio waves should be within the guidelines issued by the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

ICNIRP is an independent organisation that provides scientific advice and guidance on the health and environmental effects of non-ionizing radiation. It is formally recognised as an official collaborating non-governmental organisation by the WHO and the International Labour Organisation and is

also consulted by the European Commission. ICNIRP produce guidelines covering the safe operation of mobile phone networks.

Public Health England stated that:

“A Considerable amount of research has been carried out on radio waves and we anticipate no negative effects on public health. 5G is the latest evolution in mobile communications technology and currently in its development stages. 5G will have a higher data capacity than current systems in order to transmit a larger volume of data.

Some 5G technology will use similar frequencies to existing communication systems. Other 5G technology will work at higher frequencies, where the main change would be less penetration of radio waves through materials, for example, walls.

While a small increase in overall exposure to radio waves is possible when 5G is added to the existing network, the overall exposure is expected to remain low and well within the guidelines from ICNIRP.”

### **Scottish Parliament Action**

PQ (S5W-22710 Mark Ruskell) (Lodged 17 April 2019): To ask the Scottish Government what involvement it has in the establishment of regulatory standards and processes in relation to the rollout of 5G technology.

Response (Paul Wheelhouse 8 May 2019):

“Legislative and regulatory powers regarding telecommunications are currently reserved to the UK Government under the policy reservation provisions of the Scotland Act (1998).

As such, the Scottish Government has no direct locus in the establishment of regulatory standards and processes in relation to the rollout of 5G technology. More generally, the day to day regulation of telecommunications is the responsibility of the UK telecommunications regulator, Ofcom.

Scottish Ministers and our officials do have regular engagement with Ofcom and seek to try to positively influence their policies, and those of UK Ministers, to try to ensure they work in the interests of Scottish consumers.”

### **Scottish Government Action**

On 26 August 2019, the Scottish Government published [5G: strategy for Scotland](#), which sets out what actions the Scottish Government and others have already taken in supporting 5G technology in Scotland, and contains new commitments while the technology is being rolled out. However, as the regulatory powers relating to telecommunications are reserved, this strategy

does not touch on the standards of the technology or any health concerns about its implementation.

Alongside the strategy, the Scottish Government published '[5G and public health: position statement](#)', which sets out the current advice that the Scottish Government has on 5G in relation to public health.

## **UK Government Action**

The UK Government [responded to a similar petition on the 19 March 2019](#), noting that:

“Exposure to radio waves has been carefully researched and reviewed. The overall weight of evidence does not suggest devices producing exposures within current guidelines pose a risk to public health.”

The report noted that Public Health England's advice has been that the Government adopt the guidelines of ICNIRP. This response also directly addresses the NTP report cited by the petitioner, noting that there were two reasons why the findings were not applicable to humans:

- 1) exposure levels and durations were greater than people may receive from mobile phones, and
- 2) the rats and mice in the sample received exposure to their whole bodies, while a person using a phone would experience only localised exposure in their pocket or next to their head.

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12/09/2019

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