

**UK Government:  
Department for Transport:**

**“Accessibility Action Plan Consultation”**

**“A Transport System that is Open to Everyone”**

**Response on behalf of**

**Electrosensitivity UK**

**November 2017**

Action 1, p.19:

There is an urgent need for consideration to be given to accessibility by people disabled on transport systems by the presence of:

(a) Wifi,  
and

(b) Mobile phone radiation from fellow passengers and transport employees.

A UK government-sponsored survey showed that 4% of the UK population was adversely affected by this type of electromagnetic radiation, such as from Wifi and mobile phones (Eltiti S et al, 2007). Studies in the USA have shown that 40% of US adults, viz. those with long-term autoimmune or chronic inflammatory conditions, are subliminally or subconsciously affected adversely by this type of radiation, although it can have conscious symptomatology (Marshal TG et al, 2017).

At present people who are functionally impaired by this condition, often called Electromagnetic Hyper-Sensitivity (EHS), can find it impossible, or very distressing and unpleasant, to travel on trains, buses, aircraft etc., or to cope with railway stations or airports, where there is Wifi and proximal usage of mobile phones by staff and other passengers.

At present the UK has limits (ICNIRP, 1998) for exposure to electromagnetic radiation which are designed to prevent heating. The danger of heating, however, is irrelevant to people with EHS and the 40% of adults sensitive to this radiation, since the neurological and cancer effects occur at lower levels of exposure than those causing heating.

In addition, these ICNIRP 1998 heating limits are restricted to an average value over six minutes. In reality, however, most people spend more than six minutes on a train, bus or aircraft, or in a railway station or airport, and therefore need limits based on long-term exposure.

For long-term exposures international limits are given by the EUROPAEM EMF Guidelines 2016:

<https://www.degruyter.com/view/j/reveh.2016.31.issue-3/reveh-2016-0011/reveh-2016-0011.xml>

These guidelines include long-term exposure relevant to most transport scenarios and also include limits appropriate to both those people who are sensitive to electromagnetic radiation and the general population.

Consult. Qu.1, p.23, Action 5, page 25:

For access to Buses, Taxis and Private Hire Vehicles for people with EHS it is important that the vehicle does not have radiation and transmitter equipment activated, such as Wifi or Bluetooth.

#### Action 7, p.27

In addition to the Blue Badge scheme, it would be helpful to have a Green Badge scheme for people disabled by man-made electromagnetic radiation, and also chemicals, since the two conditions are closely related (Belpomme D et al, 2015). This would enable staff operating transport systems to identify the types of needs of the people with a Green Badge, and give support to people with these environmental intolerances in their request for equality of access to the transport system.

#### Action 8, p.28

In the refurbishment of railway stations, it would be helpful to have designated areas, including separate Waiting Rooms if possible, as Green Areas, without Wifi and without mobile phone use.

#### Consult.Qu.2, p.30

At present there is no provision for people to find out which parts of an airport and which sections of seating in a plane are, or could be, areas designated as without Wifi and without mobile phone use. Both aspects would be very helpful, perhaps designated as Green Areas for those with this intolerance. Some airlines on their website provide contact numbers for people requesting the absence of nuts or peanuts on a flight if the traveller is sensitive to this environmental issue, but I have not yet seen a similar notification about electromagnetic radiation. This is curious, because the prevalence of peanut allergy is about 1.6-1.9% of UK children, whereas the prevalence of EHS in national surveys is often given as 3.1-3.8%.

#### Consult.Qu.4, p.32

Because ships are often large in comparison with trains, buses, taxis and aircraft, they have been less of a problem for people with EHS. Nevertheless, the same requirements of having areas free from Wifi and mobile phone use apply.

#### Consult.Qu.6, p.44

So far, people with EHS have generally found transports services very unresponsive to the need to restrict exposure to electromagnetic radiation to provide equality of access for people with EHS. Train operators, when approached, have not been willing to take action themselves, but pass the buck to a government agency, like PHE, or to a department, like the Department of Health, both of which are way behind the science and out of touch with the experiences of hundreds of people in the UK who suffer this condition. On the other hand, judges in first tier tribunals over the last five years have recognised the condition of EHS in awarding ESA to people with EHS, and the HSE guidance on the 2016 EMF Regulations requires employees to take action to support people affected by Wifi and Bluetooth, such as people at particular risk, like pregnant women and people with active implants. Therefore, it seems that the UK government is in a confused state over how to deal with this disability and access problem, with some branches accepting the reality of the intolerance and disability, while others still try to deny it, despite the overwhelming science now validating the condition (see the note at the end for a link to a list of relevant scientific studies).

#### Consutl.Qu.7, p.44

The UK government needs a unified approach which follows the lead of the law courts in recognising access problems for people with EHS and ensuring that they can have equality of access, as expected, it seems, under the Equality Act of 2010. The easiest way would be for Public Health England to recommend to the Department of Health that the UK ceases to follow the outdated six-minute ICNIRP heating limits for exposure to electromagnetic radiation, and instead follows the EUROPAEM EMF Guidelines 2016, which cover long-term effects as well as the short-term 6-minute effects. At present each individual person with EHS has to explain this in detail to the transport authority and even then the transport provider often refuses to take the necessary action.

In contrast, some other countries have recognised this problem of accessibility for people with EHS and for over 15 years have required transport providers to ensure that, for instance, a 'quiet' coach on a train is also without any Wifi and mobile phone use – a very simple solution but not yet adopted in the UK.

Consult.Qu.8, p.48

It is usually impossible in the UK to find any part of a train, bus or aircraft, or often part of a railway station or airport, with the green environment free of man-made electromagnetic radiation appropriate for a person with EHS. There are usually no signs warning of areas which are irradiated with Wifi, or where people are allowed to use mobile phones, although often there are zones specified for smoking, in order to protect other passengers from second-hand smoke pollution. It would be excellent if each train, bus, aircraft, station and airport had defined and signposted areas free of man-made electromagnetic radiation.

Consult. Qu.11, p.50

People with EHS cannot usually use a smart phone or mobile phone, since both emit electromagnetic radiation and cannot be used with cables instead of wireless. It is therefore important that all future tickets can be provided in paper or card format. The magnetic strips as used at present are passive and do not cause health problems.

Consult.Qu.12, p.53

As stated above, transport systems at present usually seem unwilling to adapt to the accessibility needs of people disabled by man-made electromagnetic radiation, so any process by which the needs of such people could be provided for, to enable accessibility to transport systems, would be much appreciated.

Consult.Qu.13, p.56

A National Assistance Card or some other form of visible identification for people with EHS seems an excellent idea, provided that transport operators can be trained in what is needed for such people.

The key requirement would be for the person with EHS to be shown to the Green Area without Wifi or mobile phone use, and for the transport operator to ensure that other passengers respect this need.

**NOTE:**

For further scientific information see a document listing peer-reviewed studies showing health effects from man-made radiation: "Selected Studies on ES and EHS" available on the ES-UK website under "Research":

<http://www.es-uk.info/attachments/article/85/Selected%20ES%20and%20EHS%20studies.pdf>

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