



Trust

Benchmark employer / Customer experience / Personal data / Support for families / **Radio waves** / Responsible purchasing

Answering questions about radio waves

Challenges / vision / beliefs

Exposure to radio waves, particularly antennas, raises concerns regarding possible health effects. To date, no health effect has been discovered. However, whilst waiting for confirmation from ongoing additional studies, particularly regarding children and long-term usage, some health authorities have issued warnings about usage in order to reduce exposure to radio waves from mobile telephones.

Orange is keen to pursue its role in informing and supporting the parties involved in a proactive manner. The Group also provides internal training on specific safety rules for staff working on or near radio antennae.

Roadmap

For 20 years, Orange has proactively participated in the debate about radio waves by passing on information and recommendations for usage to its stakeholders. These measures are structured into 5 areas:

- ensuring total transparency in our communications with the various stakeholders regarding radio waves and communication technologies using appropriate information materials and discussion channels;
- contributing to the research effort via the Orange research laboratory (Orange Labs) into exposure levels as part of domestic or international programmes concerning wireless communications;
- ensuring compliance with local regulations (wherever such regulations exist) or applying international recommendations as appropriate;
- promoting proper mobile use as defined by the authorities;
- increasing awareness of safety rules for staff working near or on radio antennae.

News / achievements in 2017

- Continued deployment of training programmes for employees
 - In France, Orange has reported to the CNHSCT (National Committees for Health and Safety and Working Conditions) about the installation of Wi-Fi on Orange premises, and the CHSCT (Committees for Health and Safety and Working Conditions) on the implementation of workers' decree 2016-1074 of 3 August 2016. This decree defines the limits within which staff must operate at work.
 - The Orange Group policy relating to signage and security perimeters for antennae has been extended to Spain and applies to Health and Safety HR teams. This involved the presentation of the tool developed by Orange Labs to calculate security perimeters and recommendations for wearing dosimeters for staff working around antennae.



Thematic data sheets

Corporate Social Responsibility

- Raising awareness about best practice and other health-related topics
 - After the European Directive on placing radio equipment on the market came into effect in June 2017 (European directive 2014/53/EU, known as 'RED'), awareness-raising actions within the relevant job lines (purchases and marketing mainly) were implemented on a European level. These actions focus, in particular, on Specific Absorption Rates. The Radio Waves Charter is available on the France CSR site www.bienvivreledigital.orange.fr.
 - In 2017, Orange France invested €1M in Health and Safety programmes and, since 2010, has contributed to financing research carried out by ANSES (French National Agency for Food, Environmental and Occupational Health & Safety) so as to support independent research.
 - Orange Egypt is continuing its programme to raise awareness and consult with communities, which started over 15 years ago and has reached a wide audience throughout the entire country. The principle underlying the programme is to provide correct, honest, exact and impartial information about mobile technologies, and the impact of radio waves on humans and related topics.
- Integration of 5G into the radio waves and health CSR policy
 - Orange has published a document about 5G entitled "Impact of 5G technology on human exposure", detailing the possible impacts of 5G technology on the human body. In October 2017, the company presented an experiment on MIMO antennae (focusing antennae) at the European GSMA Forum. In January 2017, Orange Labs received the "Economic Impact" prize at the Rencontres du Numérique (Digital Encounters), awarded by the National Agency for Research, for the collaborative, industrial-academic research project TRIMARAN, which is researching MIMO antennae.
 - Furthermore, Orange took part in drafting the ITU-T SG5 "5G technology and human exposure to RF EMF" paper and the GSMA "5G, the internet of Things (IOT) and wearable Devices".
- Continued work with the regulatory and standards authorities, as well as other telecommunications operators, in various countries, to standardise rules and practices.

Did you know?

The ICNIRP is a worldwide, independent scientific commission, established to provide scientific opinions and recommendations regarding exposure to radio waves. In countries where radio waves are not covered by legislation, Orange voluntarily applies the ICNIRP's recommendations.

Going further

- [Orange Group website answering all your questions about radio waves](#)
- [World Health Organisation: electromagnetic waves](#)