

# Measurement of EMF exposure around small cell base station sites<sup>1</sup>

## What are small cells?

'Small cells' is an umbrella term for low-powered radio communications equipment (base stations) that provide mobile and internet services within localised areas. They are typically used where there are many people and they help to fill in and add to existing network coverage.

## Why undertake the study?

The study was undertaken to compare RF exposure values at a variety of sites, across multiple countries and in different configurations.



**295 positions measured around 98 small cell sites in three countries with the maximum measured value being 30 times below the international limits**

## What sites were measured and where?

The measurements were undertaken in South Africa, Netherlands and Italy and involved installations typically used at bus stops, advertising signage and inside of buildings.

## What did the study conclude?

'The results show that all the measured EMF exposure levels are well below the general public limits as specified by ICNIRP'

The results were consistent with other national measurement studies such as those undertaken in France<sup>2</sup>.

1 Marthinus Jacobus van Wyk, Jacobus Christiaan Visser, Christiaan Wynand le Roux; MEASUREMENT OF EMF EXPOSURE AROUND SMALL CELL BASE STATION SITES, *Radiation Protection Dosimetry*, ncy201, <https://doi.org/10.1093/rpd/ncy201>

2 L'Agence nationale des fréquences (ANFR). National French survey program. <https://www.anfr.fr/contrrole-des-frequences/exposition-du-public-aux-ondes/la-mesure-de-champ/analyse-des-mesures-realisees/#menu2>