



## **INTERNATIONAL EMF PROJECT ADVISORY COMMITTEE (IAC) MEETING**

### **ANATEL Report on EMF Activities in Brazil**

#### **1. Introduction**

The main purpose of this document is to present an update of what has been done in Brazil regarding Electromagnetic Fields – EMF since the IAC meeting in June 2020.

#### **2. Activities related to EMF Exposure**

As mentioned on last year's report, ANATEL established an Action Plan for the NIR (non-ionizing radiation) program to meet the obligations, determined in the Federal Law No. 11,934, which provided limits on human exposure to electric, magnetic, and electromagnetic fields. This Action Plan is in force and is focused on the use of monitoring equipment installed on vehicles, to obtain the current EMF exposure values in large areas. The methodology of this program is based on Recommendation ITU-T Rec.K.113 - Generation of radiofrequency electromagnetic field level maps.

In 2020, EMF exposure measurements were planned to be carried out in nearly 1903 broadcasting stations and 496 radio base stations, in 41 counties. However, due to the COVID-19 pandemic, only 700 stations were measured (552 broadcasting station and 148 base station). In the vicinity of 18 stations, the electric field values were measured exceeding 14 V/m, using drive test measurements, however, when averaged over a 6-minute time, no measurements were above 28 V/m. For the data to be made publicly available, a database is currently under development.

#### **3. New policies and legislations regarding EMF Exposure**

In order to ensure the protection of health and the environment throughout the Brazilian territory, the Federal Law no. 11,934 states that the limits recommended by the World Health Organization (WHO) for occupational and general exposure to electric, magnetic and electromagnetic fields generated by radio transmitting stations will be adopted. Noting that,

as long as no new recommendations are established by the WHO, the limits recommended by the International Commission for the Protection against Non-Ionizing Radiation (ICNIRP) will be adopted.

When the Law was enacted, ANATEL, the National Regulatory Agency, responsible for the assessment of EMF exposure, had already issued Resolution no. 700/2018 defining procedures for assessing compliance with EMF exposure limits, in line with the latest version of the Recommendation ITU-T K.100.

In this sense, we follow the recent publication of the ICNIRP 2020 Guidelines for Limiting Exposure to Electromagnetic Fields (100 kHz to 300 GHz) and we are evaluating the need for any modification in the procedures for assessing compliance with EMF exposure limits, in order to maintain compatibility with the new Guidelines.

#### **4. New public information activities**

As the result of the Action Plan explained above, ANATEL will publish a radiofrequency electromagnetic field level map, in order to show the population that NIR levels are being monitored and under control. The EMF level map will display the results of human exposure measurements carried out by the ANATEL and the private sector. This action is also part of a Government Open Data program.

The map is available at the following link:  
<https://informacoes.anatel.gov.br/paineis/espectro-e-orbita/mapa-de-exposicao-a-campos-eletromagneticos>

#### **5. Final comments**

Finally, ANATEL continues to keep an open dialogue with society, operators, lawmakers, and other governmental authorities to present clear information about what is being done in Brazil and worldwide regarding EMF exposure issues, always following WHO responses to public concern over health effects of EMF exposure.