



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 2018 (23rd).

2. Activities related to EMF Exposure

Anatel established an Action Plan for the NIR (non-ionizing radiation) program in order to accomplish with the obligations determined in the Federal Law nr.11,934. This Action Plan is in force and is focused on monitoring equipment installed on vehicles, to obtain the current EMF exposure values in large areas. The methodology of this program is based on ITU-T Rec.K.113 - Generation of radiofrequency electromagnetic field level maps.

Basically, there are three measurement methods: (i) Fixed Probe, (ii) Portable Probe and, (iii) Mobile Probe. At that Action Plan, the working teams are focusing in the third case - measurement using a mobile probe (drive test) – Called MonitEM. In this case it is necessary to have a clear definition of a route, where the monitoring station will pass through, assuring that all the stations that need an evaluation by Anatel would be evaluated. Any location that was identified as “relevant” after this monitoring task will have detailed measurements (case ii – Portable Probe). Any place in which the Mobile Probe measured values higher than 14 V/m is considered “relevant”. After all measurements were done the results have to compose a report describing in detail all procedures applied, as well as the analysis carried out and other results obtained in the Inspection Action. The case (i) is also used in Brazil, however only in some specific points.

3. New policies and legislations regarding EMF Exposure

The new Brazilian regulation on limits of human exposure to electromagnetic fields for frequencies between 8,3 kHz and 300 GHz was approved in October 2018, is aligned with the Federal Law nr.11,934, and establish obligations to Anatel and Operators.

There is the concept of critical area, which is the 50-meters-radius region close by hospitals, clinics, schools, day care centers and homes for old people. ANATEL or a specialized organization designated by ANATEL will have to assess the compliance to EMF exposure by the radiocommunication stations installed in these areas not later than 60 days after the issue of the station license.

A significant statistical sample of these new stations is allowed, in order to accomplish the regulation.

The Law determines that EMF exposure evaluation will have to be done in all radiocommunication stations in maximum 5 years intervals. Additionally, all mobile phones specific absorption rate (SAR) and all characteristics of radiocommunication stations necessary to evaluate the EMF exposure will be published in the Internet.

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 are under control.

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 points of view.