EME SPY: a RF Dosimeter to Inform the Public



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In Brief...

1 THE PROBLEM

The proliferation of wireless networks raises questions among the general public: Is the current level of electromagnetic field above normal standards?

2 THE ACTIONS

The City of Bourges set up an Electromagnetic Waves Observatory, has invested in two EME SPY and offers its residents the possibility to take measurements at home for free.

10 THE RESULTS

120 measurements taken in public places and private homes: 95% of these measurements are less than 1 V/m. Through its analysis of frequency bands, EME SPY shows that in the case of Bourges the main contributors of the electromagnetic field measured in a household are not the external antennas, but the domestic appliances. The number of requests for measurements is declining and the public is reassured.

The problem: A Population Concerned about Exposure to Radio Frequency

The public is increasingly concerned about the potential problems which can arise from the exposure to radio frequency emitted by mobile phone base station antennas. The core question is: Have the thresholds recommended by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) concerning health risks been exceeded? Several associations have been formed to challenge the public authorities and the city halls on this matter.

✓ The actions: The Set-Up of an Electromagnetic Waves Observatory Equipped with Two "EME SPY"

Faced with these questions and also the concerns of its residents, the City of Bourges set up an Electromagnetic Waves Observatory in 2010 to inform the public and establish a dialogue on the level of exposure to radio frequency. Anne Paepegaey, Project Manager, Department of Department of Ecology and Development, City Hall of Bourges, explains, "The starting point of this Observatory was related to the

concerns of the local residents who were opposed to the installation of mobile phone base station antennas".

Various stakeholders, the councils of the neighborhoods, the Regional Health Agency (l'Agence Régionale de Santé), French Consumer Council (UFC "Que Choisir") and the elected officials held a meeting to exchange views on, for example, the proposed installation of new base station antennas, and where to publish electromagnetic wave measurements taken periodically in different parts of the city: schools, cultural centers, administrative buildings and sports facilities.

EME SPY, a solution to taking measurements in all transparency



To provide credible measurements to its residents, the City Hall of Bourges decided to take "independent" measurements. The City hall thus chose Microwave Vision's technical solution.

Bourges offers free measurements with this device, upon request from individuals, in their apartments, houses or gardens. EME SPY reports the levels of exposure to radio frequency in a simple way. The device is light weight, portable and the mea-

surement time is the only parameter to adjust: this reinforces public confidence in the measurement results. It measures 14 types of electromagnetic waves emitted from various transmission channels: radio (FM), mobile phone (GSM, UMTS), television, emergency services network, WiFi, WiMAX as well as the electromagnetic waves emitted by some household

appliances such as microwave ovens or cordless phones that use the DECT standard. EME SPY is used in places requested by the individual (kitchen, dining room, bedroom, balcony, garden, etc.) and pre-defined by the City Hall officers assigned to the task. A report on the level of RF exposure of the home is then sent to the individuals, one week after the municipal employees have processed the data in a totally transparent manner.

■ The results: Positive Impacts on the City of Bourges

According to a set of around 120 measurements taken in the town (half of which were performed on the premises of the residents), 95% of the results were lower than the rate of 1 V/m. Through its analysis by frequency bands, the EME SPY shows that the main contributors of the electromagnetic field are not base station antennas, but home appliances. The scientific conclusions reassure the population: the number of measurements requested by residents is now on the decline.

Acknowledgement: City Hall of Bourges



WATCH THE VIDEO http://youtu.be/dfMAB7veKaQ

