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Measuring and Information System for Monitoring Microwave Contamination of Urban Environment

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There is a lot of data confirming the effect of microwave radiation on psychophysiology and human health. The paper considers a method and a measuring and information system for dynamic monitoring of microwave environmental pollution in cities. It is assumed that a fully implemented system will consist of thousands of portable personal devices- mobile terminals held by volunteers who move around the city in their usual life and, possibly, a number of city vehicles will be equipped with such terminals. The structure and features of the technical implementation of the proposed distributed, non-deterministic system, which allows real-time mapping of the microwave dose load of the city population, are considered. The personal terminal records the geographic position using a GPS navigator as well as the basic parameters of microwave dosimetry. The data are transferred to a web server where they are stored in a cloud database. From there, they can be transferred to the environmental and medical services of the city, and they can also be read and displayed in a convenient form on any device with access to the corresponding Internet resource. The results of testing a prototype of the system when acquiring data on one of the routes in the city of Moscow are presented.