Response

Response to Comments by Beekhuizen et al. on "Exposure Assessment of Mobile Phone Base Station Radiation in an Outdoor Environment Using Sequential Surrogate Modeling"

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The main objective of the study by Aerts et al. [2013a] is to conceptualize a new measurement-based methodology for the experimental assessment of RF-EMF exposure in a small to moderately sized outdoor environment. A key strength of the approach taken in Aerts et al. [2013a] is that no prior knowledge is needed about the environment (e.g., accurate location or antenna information of the base stations and transmitters, and building characteristics). In many cases, such information is not available and/or its reliability cannot be verified. Within this scope, the work of Aerts et al. [2013a] offers competitive results when compared to more sophisticated models.

In those cases where additional information is available, it becomes possible to deal with larger areas and to assess both temporal changes and vertical exposure using 3D simulation models. To this end, the work of Bürgi et al. [2008] has also been cited multiple times by Aerts et al. [2013a]. In fact, the availability of this additional information could also be exploited by the sequential surrogate model (SSM) approach in Aerts et al. [2013a] to further reduce the cost of the overall measurement procedure.

Finally, it is noted that the comments of Beekhuizen et al. [2013] do not invalidate the methodology nor any of the results presented in the work of Aerts et al. [2013a]. In fact, in a recently accepted paper [Aerts et al., 2013b], we have demonstrated the validity of the SSM approach in a moderately sized outdoor environment (approximately 1 km^2).

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