

## **Reviewer's report**

**Title:** Feasibility of a cohort study on health risks caused by radio frequency electromagnetic fields

**Version:** 1 **Date:** 7 September 2008

**Reviewer:** Anssi Auvinen

### **Reviewer's report:**

#### MAJOR COMMENTS

The manuscript describes the outcome of a process assessing the feasibility of various occupational groups for the purpose of a cohort study to evaluate possible risks from RF EMF. The issue is topical and has unquestionable public health relevance

The authors see the cohort study as purely instrumental i.e. they want to extrapolate the findings to mobile phone use (use the cohort for indirect assessment of health risks). I think it would be worthwhile to consider also the importance of the results in other perspective, i.e. it may be worthwhile on its own right and might add to the wider knowledge about EMF.

It should be specified what advantages an occupational cohort study would offer compared with e.g. a population-based case-control study.

I do not think radio amateurs are strictly an occupational cohort, as the group is defined by their hobby.

It is not very clear throughout to what extent the conclusions are context-specific (apply only to Germany) and where they hold also for other settings. This should be clarified as it important for applicability in other countries. For instance 'unreadiness to cooperate'.

The criteria used are not explained in a detailed fashion. How was the literature review conducted? What procedures were used in expert ratings?

The English language is not very fluent and needs revision. For instance 'radiofrequency' is one word.

#### MINOR COMMENTS

Methods: 'Conditions of exposure' is vague. Does this refer to level of exposure, variability in exposure and recording of exposure?

Background: the opening paragraph is very unspecific. Do you mean proportion with any exposure? Mean level of exposure? Occupational and/or environmental exposure relative to personal use of devices?

Methods/criteria for assessment: I think there is discrepancy here, with the case made first for individual exposure assessment, but in the following sentence a job-exposure matrix mentioned as an option. I believe a JEM is an aggregate measure of typical exposure and cannot be regarded as truly individual exposure assessment.

Methods/Definition of outcomes: The 'consensus' approach (studying same outcomes as in previous studies) is not well justified. This needs to be further elaborated. Is the literature covered by references 1-10? I believe there are further publications relevant for the topic

#### DISCRETIONARY COMMENTS

Abstract: radiofrequency/microwave – need to specific 'electromagnetic fields'

Background: Para 2: Please provide a reference for increasing public concern.

Methods: First para: literature review was 'realized', replace with 'carried out'.  
'Criteria catalogue' this probably refers to 'set of criteria'.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

#### **Declaration of competing interests:**

No competing interests