
Final Report

Project reference: A2004-0
Applicant's name: PD Dr. Peter Achermann
Project title: Effects of UMTS radio-frequency fields on well being and cognitive functions in human subjects with and without subjective complaints

1. State of Research.

1.1 Research activities performed, milestones and deliverables accomplished

All research activities as specified in the proposal have been accomplished and the project was terminated three months over schedule in December 2005. The following milestones have been reached within schedule: final design, approval of ethics committee, recruitment of subjects, set-up and tests, as well as the experimental phase. Even though the experimental phase was finalized on time, the analysis of the data was more intricate than foreseen, due to the large quantity of data and the complex statistical procedures required. The ensuing manuscript was submitted to *Environmental Health Perspectives* by the end of the year and accepted for publication on May 16, 2006. The sponsors were informed on May 19, 2006 and the paper was published on June 6, 2006. It was presented to the public on the same day at a press conference at the University of Zurich and at a video media conference with the Netherlands organized by the Dutch authorities. The study was met with large public interest in both countries. Subsequently, the results were presented at the annual conference of the *Bioelectromagnetics Society* in Cancun, Mexico, on June 14, 2006. The volunteers participating in the study were invited to an information event on July 4, 2006, where they had the opportunity to discuss their individual results. None of the sensitive subjects participated in this event.

1.2 Findings

Please refer to the attached scientific report "UMTS base station like exposure, well being and cognitive performance", which is an extended and more detailed version of the publication. This report is not intended for public distribution.

1.3 Problems

Financial

The financial budget was overdrawn by 75'893 CHF (covered by own funds). The experimental setup needed to be modified (see intermediate report, June 3, 2005) resulting in a higher expense for material by 33'326 CHF. In addition, the amplifiers were covered by the IT'IS foundation (43'867.60 CHF). The budget of 18'000 CHF for assistants was exceeded by about 19'380 CHF, as the experiments needed intense assistance (supervision of subjects). The charge for consultancy also exceeded the original estimate of cost (36'000 CHF) by about 21'510 CHF, especially due to the exceptionally high effort required with respect to communication (sponsors, public and media, study participants).

Other

All the sponsors, but for one party, kept with the confidentiality agreement. Unfortunately, the Dutch State Secretary broke the engagement by broadcasting an interview in the Netherlands prior to the Swiss press conference. The communications strategy and independency of the researchers was hereafter repeatedly questioned.

2. Annex

2.1 Publications

Sabine J. Regel, Sonja Negovetic, Martin Rösli, Veronica Berdiñas, Jürgen Schuderer, Anke Huss, Urs Lott, Niels Kuster, and Peter Achermann. UMTS Base Station-like Exposure, Well-Being, and Cognitive Performance. *Environ Health Perspect* 114:1270–1275 (2006).

2.2 Documents

- Scientific Report "UMTS base station like exposure, well being and cognitive performance" (not for public distribution)
- Financial Report (Achermann)
- Financial Report (Kuster)
- Financial Report (Rösli)
- Summary Financial Report (all)

Date and Signature

Zurich, October 6, 2006

p. achermann