

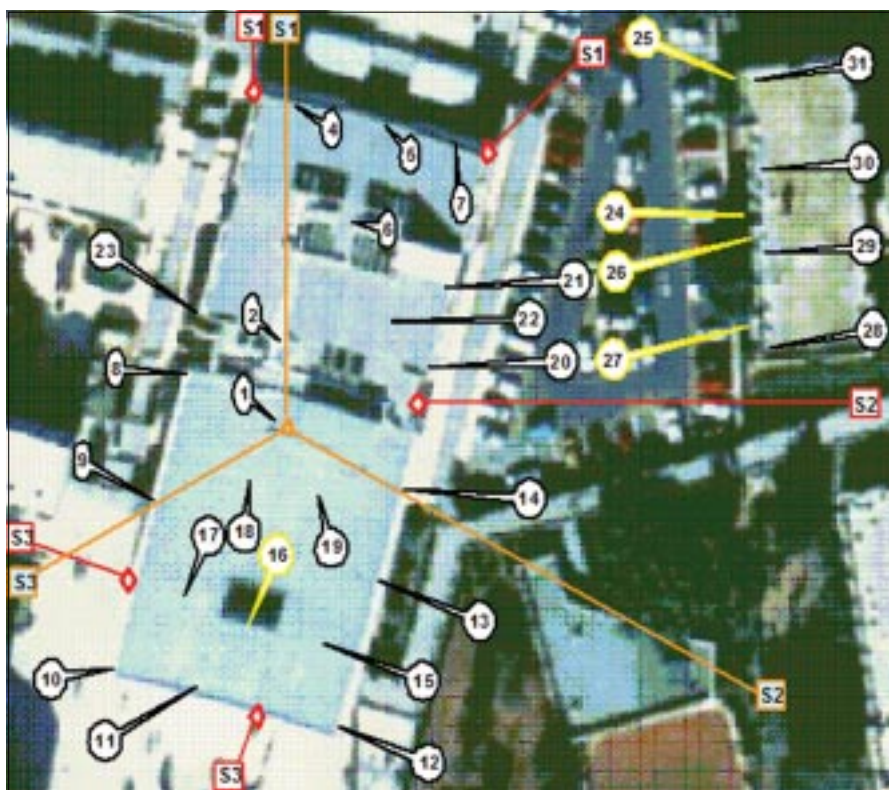


## Survey of electromagnetic fields from mobile phone base stations

*Dr. Charles V. Sammut reports*

THE DEPARTMENT OF PHYSICS recently conducted detailed measurements of electromagnetic field power density over the University Library and surrounding areas. This followed concerns expressed by some Library staff. Dr Charles V Sammut included the University as one of the 150 chosen transmission sites in a three-year national survey of electromagnetic field emissions at mobile phone base station sites. The survey, which was completed earlier this year, was planned and conducted by Dr Sammut, with the assistance of Dr Alfred Micallef and in collaboration with Malta National Laboratory (MNL). The project consisted of three main tasks. The first was the compilation of a detailed database of base station sites, including physical and transmission characteristics of the transmitting antennas. The second task was field calculation and simulation at each base station site in Malta and Gozo (almost 300) but the most difficult tasks were field measurement, analysis and reporting. The field survey equipment and logistical support were provided by MNL. A summary of the results is featured on the Malta Communications Authority website at <http://www.mca.org.mt/emfaudit/>. Some of the results, measurement and analysis techniques were presented in papers at the 2<sup>nd</sup> and 3<sup>rd</sup> International Workshop on Biological Effects of electromagnetic fields held respectively in Rhodes in October 2003 and in Kos, in October 2004.

All tested sites were found to be within the International Commission for Non Ionising Radiation Protection (ICNIRP) reference levels for public exposure.



*The figure shows the measurement plan for the University survey. It consists of an aerial photograph marked with the antenna locations and the measurement points. The average field intensity in percentage of ICNIRP public exposure levels was 0.32% and the maximum was 1.8%.*

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