CARE

Coordinating the Antenna Research in Europe

CARE Dissemination and Impact

Prof. Juan Mosig
Ecole Polytechnique Federale de Lausanne
E-mail juan.mosig@epfl.ch

WP3 - Workshops and other events

In **WP3, three CARE workshop** will be organised (in 2010, 2011 and 2012) to distribute antenna research information and present the latest R&D results achieved by the CARE secondment. These workshops will be joined with the major conference in Europe on antennas: the European Conference on Antenna&Propagation (EuCAP), see www.EuCAP2011.org.

EuCAP2006

EuCAP2007

EuCAP2009

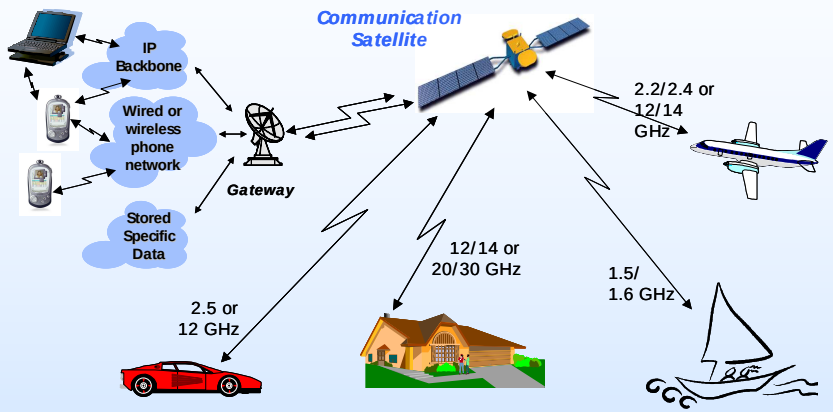
WP4 - Antenna Virtual Centre

The Antennas VCE portal will host the CARE website, where the project will be presented on the web towards the scientific community and the public.

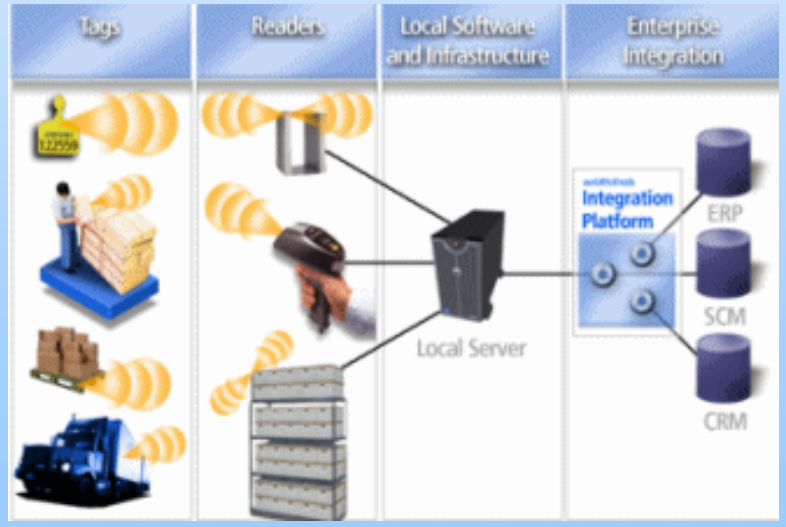
CARE is reachable at www.antennasvce.org

Impact on Communications and Sensors

In satellite communication there is a strong need to reconfigure Ku-band coverages, EIRP and polarisation in orbit. Conventional technologies are too expensive and heavy and new, flexible but simple and lightweight technologies are needed.

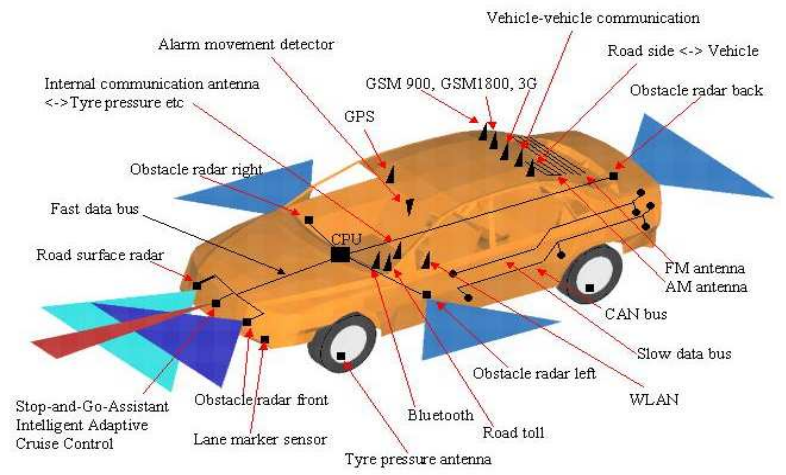


Satellite communication systems



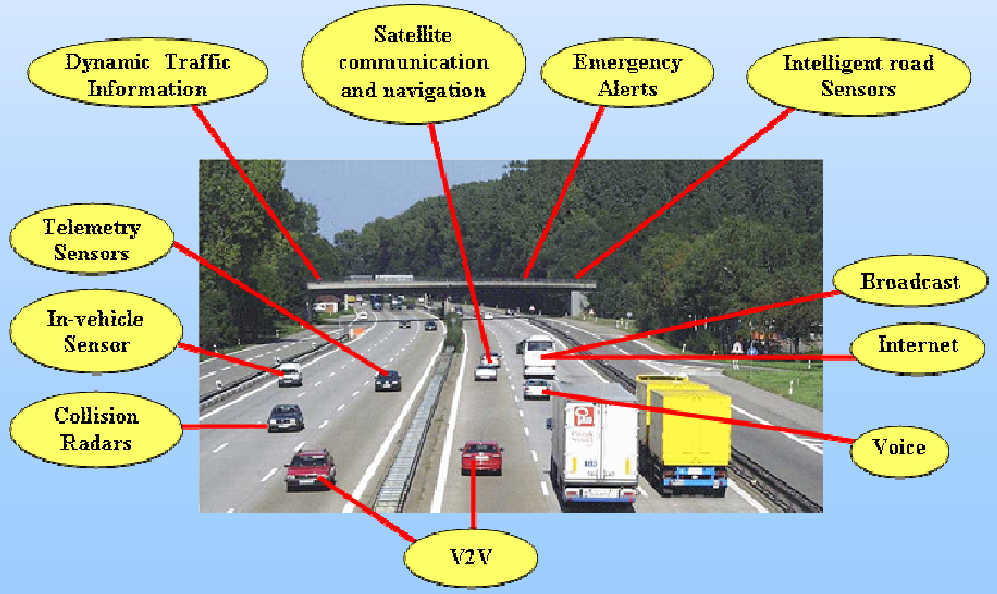
Wireless communications based on RFID and Smart Tags are expected to improve the quality of the manufacturing processes by tracing the assembling and delivery during the entire product lifecycle.

Impact on Transport



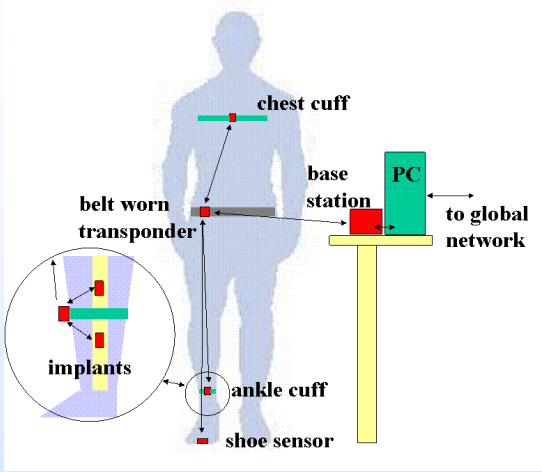
Advanced antenna technologies need to be faced in order to satisfy novel requirements in the sensors expected in the Intelligent Car Initiative

Complex antenna subsystems are expected to link the future transport infrastructure, for improved safety, higher transport system efficiency, reliable information to drivers, etc.



Impact on eHealth and Enviroment

Wireless sensors can be used to measure critical parameters like heart rate, oxygen saturation, arterial blood pressure, electrocardiogram (ECG), breath rate, skin temperature, respiration and glucose or patient position and activity.



Body centric communications supporting medical systems.

A key application is the tracing of the animals by wireless sensors. Studies about migration paths and other behaviour are strongly supported by data transmitted by wireless sensors carried by moving animals.