The road-safety visions of society, politics, business and science haven now been clearly defined as "Vision Zero (Accident-Free Mobility)" and "Safety for All".

The **"Ko-FAS"** (Cooperative Vehicle Safety) research initiative has set itself the goal of implementing these visions. It wants to make a contribution towards making accident-free mobility a reality. The best-possible accident protection that an automobile manufacturer could provide motor vehicle drivers with is active safety. According to official statistics, fewer than 2% of crashes are caused by technical malfunctioning. The majority result from human error. This means it is important that the driver is afforded a maximum level of support behind the wheel, to prevent the circumstances that cause accidents from even occurring.
It is against this background that the German Ministry of Economics and Technology launched the Ko-FAS research initiative on September 2009. Its aim is to achieve a significant increase in road safety and an accompanying reduction in road accidents and motoring fatalities. The joint project involves 19 partners, comprising reputable vehicle manufacturers and parts suppliers, universities and institutes of applied sciences, as well as researchinstitutes throughout the whole of Germany. A total budget of €25m has been made available to the project partners for the 4 years duration of the project.

Three joint projects, one common goal
The **Ko-FAS** initiative comprises three joint projects, known as **Ko-TAG**, **Ko-PER** and **Ko-KOMP** .

The specialists involved in the **Ko-TAG** project will be conducting research in the field of Car2Tag communication, which employs a network of transponders whose function is to precisely locate and classify objects using cooperative sensory systems. The aim in future is to employ this technology to protect particularly vulnerable road users, such as pedestrians and cyclists but it is also to be used in the area of vehicle-vehicle safety.
Researchers are now particularly interested in such questions as how this radio technology can be employed in more intense situations, such as those in which many people are involved.
The **Ko-PER** project is responsible for conducting research into processes of cooperative perception in longitudinal traffic and at intersection areas. "For this project, we are supported by the findings of the successfully concluded EU research 'PReVENT' project, but what we are now also looking for is an active exchange with the national 'simTD' (Safe Intelligent Mobility Test Field for Germany) support project. The various research activities all lead towards the same joint goal – to increase the level of safety on the roads," says Dr. Reiner Wertheimer, Ko-PER project spokesman for BMW Group Research and Technology.

The members of the **Ko-KOMP** project will be researching into protection systems for vehicles which are activated prior to an impending collision and whose aim it is to prevent an accident

from occurring or at least tempering the consequences of the accident. In particular, the project will be involved in examining systems for expanding the external vehicle shell and effecting the timely activation of autonomous emergency-brake functions. Also planned is a virtual test field for simulating communications channels for diverse road traffic scenarios.