

## **Technology field:**

## **Satellite Navigation**

Satellite navigation is omnipresent. Whether in the car, when hiking or whilst jogging: since that day, when satellite navigation was used for GPS modules in smart phones to be sold in bulk, it has become an increasingly ubiquitous part of everyday life. But also in other contexts, satellite navigation has become ever more important. With a number of large companies, Baden-Wuerttemberg is a target area for this technology.





## Satellite navigation in Baden-Wuerttemberg

Of particular relevance are the companies in Baden-Wuerttemberg dealing with the technology of satellite navigation. There is an increasing cooperation between scientific institutes and companies operating in this sector as well as growing intersections with the information and telecommunications sector. The manufactured products vary from navigational instruments used in cars or trucks ("Toll-Collect") to earthquake forecasting systems or environmental measurement tools.

In Baden-Wuerttemberg, the leading producer of satellite navigation technology is EADS Astrium GmbH. Further large companies are Alcatel Lucent, BOSCH, Siemens and T-Systems which are equally strengthening the international competitiveness. But also small and medium-sized enterprises make Baden-Wuerttemberg a highly-innovative and dynamic location.

The research landscape is characterized by the universities of Karlsruhe and Stuttgart that are investigating satellite navigation in the context of aerospace technology. The German Aerospace Center (DLR) with premises in Stuttgart and Lampoldshausen as well as non-university research institutes, such as the Research Center for Informatics, ensure the availability of specialized know-how in the field of satellite navigation technology and mobile IT, particularly for industrial use.

By the time the Galileo satellite navigation system is fully operational - prospectively in 2014 - the importance of satellite navigation will continue to increase in application fields such as telecommunication, information technology and the automotive sector. According to studies of the European Union, the market for satellite navigation products and services is expected to grow sharply in the near future.