

## SATELLITE NAVIGATION SYSTEM IN THE TRANSPORT GALILEO - NEW SOLUTIONS

### Summary

In order to meet the expectations of the modern development of the EU economy, European Union is building Galileo, Global Navigation Satellite System/GNSS/, which provides full operational readiness of the Year 2013. Satellite navigation system Galileo is a joint initiative of the European Union and the European Space Agency, which responds to the challenges of the contemporary global economy and technological progress. Galileo is the largest project based on infrastructure and use of space in the history of the European Union, a satellite navigation and services based on it will be applied in many areas of the economy.

Users of satellite must now determine their own position based upon the military systems. Both, the GPS and GLONASS, which are characterized by a military origin, do not guarantee the correctness and continuity of action. Since the determination of position using satellite signals are already standard in navigation at sea and in the near future will become the primary source of information about the position and motion parameters for land and air, interference in the transmission of signals by the operators of these systems could result in dangerous situations life-threatening.

Therefore, Europe has decided to create their own independent, which is under the control of civilian satellite navigation system, however, compatible with the currently existing. According to assumptions, Galileo should provide high accuracy and availability of its signals, even at high latitudes (up to 75 °), allowing users on the northern areas of Europe use of full functionality of the system.

In addition, Galileo will provide a significant increase in employment and will help to develop new applications using the full range of opportunities offered by global satellite navigation systems.

This paper will present application of the Galileo satellite navigation system in the different modes of transport.

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