# **DGNSS Based Multisensor Navigator for Railway State Monitoring**

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**Key words**: Engineering survey, Laser scanning, Terrestrial Laser scanning for engineering survey, site surveying, data processing, rail way deformation analysis

#### **SUMMARY**

Reconstruction of existing railway lines entails obtaining complete, accurate and consistent information on existing track and trackside topography. The work of measurement, evaluation and computation carried out by surveyors not only makes a major contribution to ascertaining the actual status as a basis for planning the line layout, but also provides the basis for analysis of track geometry and running dynamics for a new theoretical track geometry based on absolute coordinates. The hybrid track measurement system presented here records existing track geometries using GPS and kinematic methods as well as directly from the Imager 5006 laser scanner.

### **BIOGRAPHICAL NOTES**

**Dr. Ivo Milev,** born 1963. Graduated in 1988 as Dipl.-Ing. in Surveying and Mining Engineering from Technical University of Sofia. Obtaining doctorate degree in 2000 from Technical University of Berlin. Since 1998 Head of Engineering Surveying Development Group of technet GmbH Berlin

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