Classical and New-Age Technology for Monitoring and Early-Alarm Systems

Desislava Staykova and Ivo Milev (Germany)

Key words: Deformation measurement

SUMMARY

The evolution of the laser scanning and the classical surveying technology during the last decade offers a new possibility for surveying of large areas. During the last decade the scanning technology and the robotic total stations becomes a part of the monitoring of infrastructure and natural objects, which has always been of high priority for the engineering survey. The benefit of using such technology is the possibility for continuous and high dense data acquisition. The combination of sensor and data fusion for this measurement techniques as well as the application of the new age algorithms for data per-and post-processing gives the possibility for near real-time high accurate structural deformation monitoring. Continues data recording, adjustment and transfer are crucial as they proved information at any time for different structure variations and complexities.

Classical and New-Age Technology for Monitoring and Early-Alarm Systems (8334) Desislava Staykova and Ivo Milev (Germany)

FIG Working Week 2016 Recovery from Disaster Christchurch, New Zealand, May 2–6, 2016