

THE PERFORMING OF THE CIVIL ENGINEERING AND BUILDING SERVICES FACULTY'S TOPOGRAPHIC NETWORK AND THE INVENTORY OF ITS SPATIAL CO-ORDINATES

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Abstract

This paper describes a methodology to perform the local proper network of supporting points in order to be used in practical applications of Surveying discipline. The usefulness of these points is obvious by the fact that it involves greater responsibility in addressing land measurement techniques and puts the students in a real situation with the opportunity at any time to verify the measurement's results. Also topographic points will be used as benchmarks to in-time monitoring of the buildings behavior surrounding the Faculty of Civil Engineering and Building Services. In order to determine the coordinates of the new points was used GNSS Permanent Stations National Network using RTK method: RTCM (Radio Technical Commission for Maritime Services). Measurements were performed with GPS SOUTH S82T, whose field book has implemented software transcomputation real-time geographic coordinates obtained in STEREO-70 coordinate system. Network of permanent GNSS stations has used fixed station IASI_2.3 and virtual station RO_MAC_3.1_GG. Solutions for new points determined were fixed, the determination's accuracy being ranged from 0.034-0.010 meters.

Key words: locating network, Global Positioning System – GPS, spatial coordinates