



GPR and magnetic surveying of terrains contaminated by UXO

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GPR surveying (GPR- Ground Penetrating Radar), with magnetic and electromagnetic measuring and are applied in the process of detection in the terrains contaminated by various unexploded deadly devices (UXO- Unexploded Ordnance; aerial bombs, mines) and other subsurface objects. On the basis of the results of magnetic, electromagnetic and GPR surveying of the terrains contaminated by UXO, and correlation of this methods it is possible to locate the zones where anomalous intensity of magnetic and/or electromagnetic field has been registered. Anomalous magnetic-field intensities and discontinuities in GPR data point to the existence of artificial objects in the investigated area.

The results of application of GPR and magnetic/electromagnetic survey during the process of detection of different UXO on contaminated terrains in Serbia are partly shown in this paper.

During 2002 and 2003, GMI conducted several explorations in order to investigate the terrains bombed during the NATO bombing.

According to its scope and complexity, the most complicated project was detection of UXO on the locations of the demolished bridges on the river Danube in Novi Sad. On the location of the demolished bridge in Ostružnica, UXO have been detected by using magnetic, electromagnetic and GPR survey.

In Batajnica, on the location of the military airport, an aerial bomb has been detected by application of GPR field survey. On a private property on Mt. Avala, GPR and magnetic survey of the terrain with an aerial bomb have been performed.

Results of surveying in the terrains on which unexploded bombs, mines or other deadly

devices are located, are shown on 2D or 3D diagrams. Positions of the zones with high anomalies of the magnetic field are shown on these diagrams. Characteristic anomalies of the magnetic field are indicators of UXO positions.