



## **Reliable Technology of GNSS/RTK Positioning in Severe Observational Conditions**

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Nowadays GNSS/RTK positioning is a very efficient technique for determination of coordinates especially when it is based on permanent reference stations. It allows every land surveyor to do his work easily and efficiently. However there are some situations that the use of RTK technique makes some difficulties, especially if a GNSS receiver has not full availability for satellites. It is well known that obstructions caused by trees, buildings, electric lines etc. limit satellite availability. In that situations gross errors can happen. In order to avoid occurring misleading coordinates we can use more than one receiver. The paper presents practical tests and description of the GNSS/RTK technology based on the use of three different GNSS receivers at the same time for the specific control points. Three different GNSS/RTK receivers can be placed on a special line construction and additionally RTK positions are send in real-time to a computer. The software on the computer analyses not only precision but also accuracy of determined RTK positions. In effect that solution can allow obtaining reliable coordinates even if observational GNSS conditions are very severe.