

Infrastructure Maintenance Supported by Low Cost GNSS Applications

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SUMMARY

Today global navigation systems have become a part of our everyday life. It is part of many useful things and assisted people in many ways. It is part of the marine, the aircraft and traffic issues - from private user up to logistic corporation. Also it is used in agricultural companies for precise farming as well as for information systems in all kind of tasks like geology, archeology, hydrology and a lot more. In the sector of engineering it's supports and guides the construction machines. Diverse scientific experiments and duties utilize GPS as part of their time measuring systems. In the field of survey the exploit broadness is also widely spread. Our aim is to providing a solution for engineering professionals but on the basis of a mass market Android application platform. So combining simplicity in handling with object orientated databases - where targets can be addressed and edited. It can be used by people without special surveyor education but produces outcomes that can further be used in high end solutions. A qualified post processing is any time possible. A large part of the world doesn't have the infrastructure for bidirectional online services for high precision GNSS and also have a lack of money for cost intensive two frequency devices. In conclusion we try to use the possibilities that are available at the time to raise the precision of low cost GNSS devices. The fields of use are the rail and road maintenance (infrastructure and building sites) as well as the power supply infrastructure.