Engaging commercial RTK Network Services for precision and availability - ongoing experiences from SmartNet Australia

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SUMMARY

The majority of GNSS Network RTK projects have been implemented following the economical justification that an active geodetic network will reduce the costs and challenges of maintaining a traditional (passive) geodetic network, wherein the maintenance of the benchmarks and the control survey were a significant part of the owner's budget. Even so, the ongoing management and maintenance of active geodetic networks can be overwhelming in both time and resources for governmental organisations. This is where experienced private companies can assist, firstly in efficiently handling the commercial delivery and marketing of GNSS services, and secondly providing income streams to the respective network owners enabling them to manage and maintain infrastructure in a more viable manner.

SmartNet Aus is a Leica Geosystems and C.R.Kennedy joint initiative to provide GNSS CORS-based services to the Surveying, Construction, Precision Agriculture and GIS markets throughout Australia. Founded in late 2009, SmartNet Aus is now the largest provider of CORS-based services in Australia seamlessly combining CORS from governmental and private organisations.

This paper will focus on the practicalities and challenges of running and delivering commercial CORS-based GNSS services rather than the GNSS technology itself. Drawing from our own experiences, three broad topics are discussed; (1) what it takes to keep a service running 24/7 and consistently meeting customer expectations, (2) the issues around building CORS networks based on shared infrastructure and managing coordinates, and (3) the challenges of bringing such services to the market through various business models, sales and support channels.

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