The Ordnance Survey Ireland Real-time Positioning Solution

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SUMMARY

Ordnance Survey Ireland (OSi), the Irish National Mapping Agency, has over the last number of years developed a national real-time GPS positioning system. With the need to continually improve efficiencies in methods of collecting geoinformation and building on the passive realisation of ETRF89 in Ireland in 1995, OSi has established a permanent active GPS network in Ireland which is based on Leica Geosystems technology. The network has gone through a number of significant development phases; from an initial GPS Rinex data ftp download service; to the development of a GPS RTK positioning service for the Dublin area based on GSM communication; to the upgrading of the national network from a post-processing solution to a national real-time GPS Network RTK solution based on GSM communications; to the recent system upgrade to provide end users with GPRS access to the Network RTK solution. This paper will describe the various development phases and discuss the challenges and opportunities that were encountered along the way.

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