

Improvement of Boundary Demarcation Techniques Using Geodetic Control Networks

Rasheed Alsanafi (Yemen)

Key words: Access to land; Cadastre; Cartography; GNSS/GPS; Positioning; Boundary Demarcation 1; Geodetic Control Networks 2; Geodesy Integration 3

SUMMARY

Abstract

There is often poor precision in cadastral mapping and demarcation institutions that result in boundary disputes. This study suggests a better boundary demarcation process which is based on the high accuracy geodetic control networks. Combination of integrated GNSS observations and classical survey methods is used in determining valid property boundaries. An example is a case study, which shows significant gains in positional accuracy, which reduces the chances of legal disputes. The research highlights the enormous need to integrate geodesy in the modern cadastral practice.