

The Uganda Geodetic Reference Framework (UGRF) as a Backbone for the National Geospatial Infrastructure in Uganda

Richard Oput, Godfrey Toko, Grace Kagoro, Ibrahim Mageseso and William Kambu (Uganda)

Key words: Access to land; Cadastre; Capacity building; CPD; Curricula; Deformation measurement; Digital cadastre; Education; e-Governance; Engineering survey; Geoinformation/GI; GNSS/GPS; GSDI; Hydrography; Land distribution; Land management; Land readjustment; Low cost technology; Positioning; Professional practice; Property taxes; Reference frames; Reference systems; Risk management; Security of tenure; Spatial planning; Tunnel surveying; Valuation

SUMMARY

Spatial data plays an important role in achieving Uganda's vision 2040. Spatial data is required for integrated spatial planning, implementation and monitoring of Government programmes. Spatial data facilitates efficient and optimal use of Uganda's land and natural resources such as forests, minerals, oils and gas, energy and wetlands. Furthermore, spatial data and its related applications and services promote efficiency and transparency in public management functions such as urban management, fair and equitable tax assessment, monitoring, security, agriculture and farming.

The UGRF development is based on the current trends of Geodetic and Geospatial data integration and framework. The Geodetic Network is composed of the Passive Geodetic Control Points, Active Geodetic Control Stations and the Geoid Model.

Keywords

Uganda National Land Information System (UgNLIS), Spatial Data Infrastructure (SDI), Geospatial Framework, Spatial Data, Uganda Geodetic Reference Framework (UGRF).

The Uganda Geodetic Reference Framework (UGRF) as a Backbone for the National Geospatial Infrastructure in Uganda (11580)

Richard Oput, Godfrey Toko, Grace Kagoro, Ibrahim Mageseso and William Kambu (Uganda)

FIG Congress 2022

Volunteering for the future - Geospatial excellence for a better living

Warsaw, Poland, 11–15 September 2022