GNSS APPLICATION IN THE TRANSPORT SECTOR



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WHAT DOES TRANSPORT & COMMUNICATION INVOLVE?

- The movement of goods, human beings and animals to and from
- Various forms of interaction e.g by phone, mail etc.
- The infrastructure utilized to facilitate all this

BACKGROUND

- Zimbabwe had an enviable transport infrastructure
- Maintaining this proved to be a challenge having emerged from a war situation.
- GNSS technology was not available then in most third world countries help to ease the challenges

BACKGROUND cont.

- GIS emphasis was on manipulation of data rather than collection methods.
- Satellite imagery- though gained momentum, the resolution was of poor quality.
- Global positioning system (GPS) is more popular than GNSS

BACKGROUND cont.

- Traditional methods of updating maps are now obsolete
- Various new options available have their own merits and demerits
- GNSS has more merits
- Transport & Communication infrastructure require medium to large scale maps

PROGRESS MADE

- Development of the sector continues at a slow pace due to challenges related to most third world countries
- Civil Aviation Authority of Zimbabwe (CAAZ) had international civil aviation requirements to comply with
- The Department of Surveyor_General (DSG) with the assistance of an NGO from Netherlands did limited work for CAAZ using GNSS

PROGRESS MADE cont.

- DSG has acquired Geodetic & hand held GPS receivers though not enough
- Training

USE OF GNSS AT DSG

- Zimbabwe urgently needs up-to-date maps to portray the terrain situation as influenced by the Land Reform
- The new maps will be useful when making further developmental plans
- Thus creating multi- purpose essential database

BENEFICIARIES OF GNSS DATA

- Ministry of Health & Child Welfare:
 Out-reach to HIV-AIDS patients & to reduce Malaria prevalence areas
- Ministry of environment & tourism: A good infrastructure will promote the sectors development
- NGOS: Food distribution etc. in times of need

BENEFICIARIES OF GNSS DATA cont.

- Ministry of Transport & Communication
- Ministry of Agriculture, Land & Resettlement
- The private sector e.t.c

CONSTRAINTS

- As a developing country there are other life threatening priorities to deal with urgently
- Foreign currency issues overcast the sourcing of GNSS technology & training

WAYFORWARD

- Partnerships may have to be developed with our stakeholders to ensure that capital is raised
- Policy and decision makers have to be educated in this regard to obtain necessary support

CONCLUSION

- A pilot project was conducted as mentioned earlier on, it is now time to start utilizing the technology resources permit.
- There will be need to train more people to ensure continuity

THANK YOU