IMPLEMENTATION OF A MINING CADASTRE AND REGISTRY SYSTEM (MCRS) INUGANDA

By:

Agnes Alaba

Ag. Assistant Commissioner-Geodata

GSMD

PRESENTATION OUTLINE

- BACKGROUND
- MCRS DESIGN
- MCRS IMPLEMENTATION
- CHALLENGES/ISSUES
- FUTURE AND PROSPECT OF MCRS IN UGANDA

Introduction and background

▸ In order to improve the pace and effectiveness of the implementation of its new mining development strategy, the Government requested for a technical assistance credit from the World Bank, Nordic Development Fund and African Development Bank. This credit became effective on 15th December 2003 as Sustainable Management of Mineral Resources Project (SMMRP)

MCRS is part of the sub components of the SMMRP. The objectives of MCRS are:

Objectives of MCRS

To improve the entire process of licensing and the administration of the mineral sector; a computerize system that capture all transactions that take place during the life cycle of mineral.

To established a system that is <u>effective and that will increase efficiency </u>in the granting of mineral rights and improve accuracy and accessibility of information. The system that

is transparent, public, of general application, non-discretionary and will respect the priority of the first application presented.

Establishment of MCRS Design Stage

The establishment of the MCRS has been executed in 2 two stages;

(i) The Design stage –Swedish Geological(Hifab) in association with sunshine projects Ltd.(u).

Analysis of existing situation:
- Licence management largerly manual with spatial data captured in ArcGIS and non-spatial data in Excel spread sheet.
- Spatial overlaps
- Manual Workflow management

DESIGN observations with the Mining legislation

- FCFS determined by CAO's Office; time of placing of beacons is used as basis of priority that is liable to manipulation.

- Spatial overlap recorded coordinate related issues.

- MCRS to be established at HQ and later rolled out to regional offices, however an offline solution recommended due to problem of IT infrastructure.

Design of MCRS

Workflows Designed for application & renewals, transfer, surrender and revocations for following mineral rights;

-Exploration
-Retention Licence
-Mining lease and
-Location

All Business Processes were model in workflow for each licence type except for prospecting:
The workflow included all the processes followed during each licence life cycle: from applications(reception), processing up to granting, renewal and all obligation of the mineral right holders as prescribed in the Uganda's mining legislation.

Implementation of MCRS

- (ii) Implementation stage.
- Contract for implementation by MTL, Tanzania commenced in June 2011

Based on a flexi cadastre architecture/system

and the existing mining code of Uganda

Status of work

- Data import and migration
  - From ArcGIS and Excel spreadsheet
  - All prospecting licence capture
  - Data capture of all missing attribute and spatial content.
  - Workflow translated into flexi procedure
  - UAT(User Acceptance Test where key functionalities where demonstrated,)
  - Training (GIS, introductions and hands on flexi cadastre, Mining legislation..)

System capabilities

- System scalability – currently implemented at head office Entebbe , with possibility of connectivity to other regional offices;

System capabilities

User friendly- contains a graphical user interface;

Legal framework

- Workflows for all license types both spatial and non spatial licenses were designed in accordance with Uganda Mining code and implemented in Flexi cadastre

Usability

The system allows for advance searching that enables the DGSM to fulfill their obligations of reporting and monitoring compliance by mineral rights holders.

▶ **Automatic control of Duration of Mineral rights**

◦ System configured to take into account legal duration of each type of mineral right as defined by the Ugandan Mining Law and Regulations.

Notifications

◦ Atomically informs of required action as part of licensing process such as fees payments and reporting obligation;
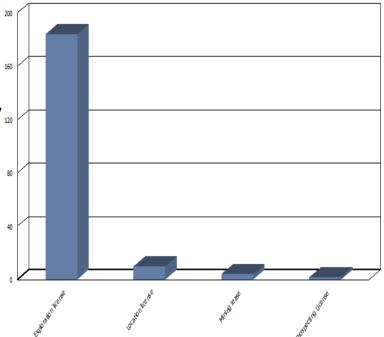
FCFS

◦ The systems is capable of enforcing the principles of first come First serve by processing license in a correct sequence as well as checking for overlaps with
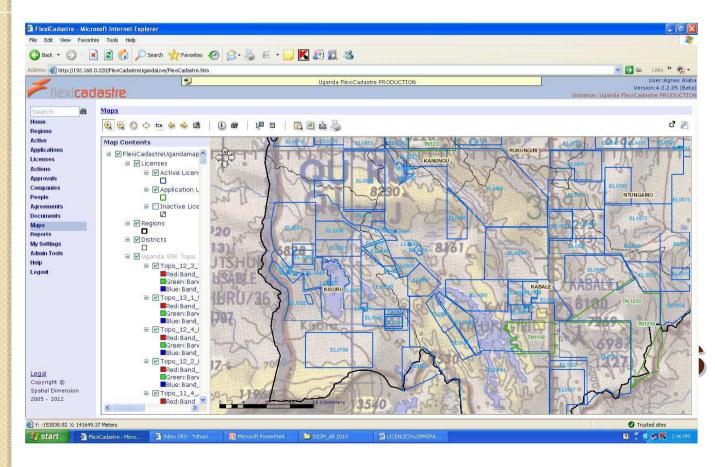
Security

▸ System security

▸ Provide security tools to preserve the confidentiality and stability of information and system auditing
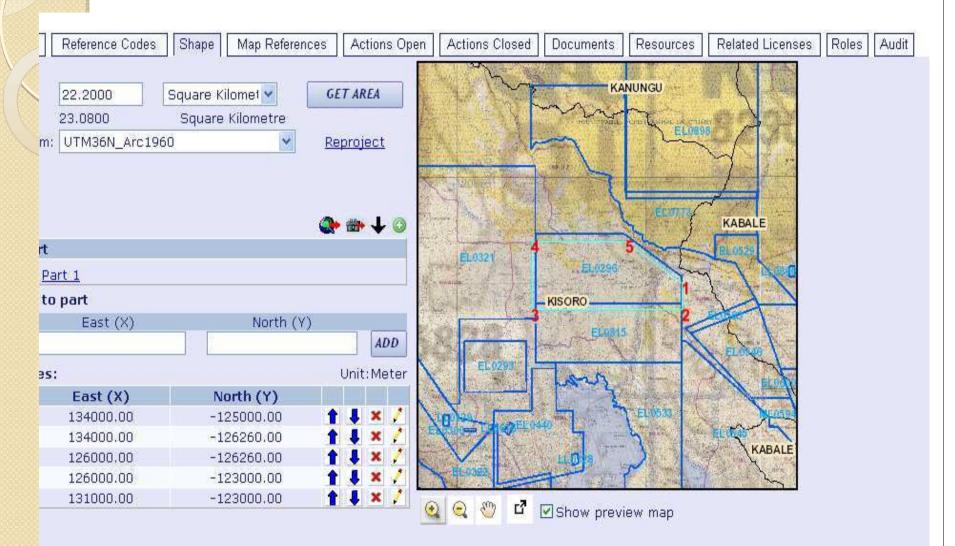
reporting

▶ Facilitate statistical treatment of mining title information ; statistical reports can be automatically generated on monthly, quarterly, or yearly basis (which ever is required);

▶ The system can also provide for automatic generation of historic file with information concerning cancelled or expired license
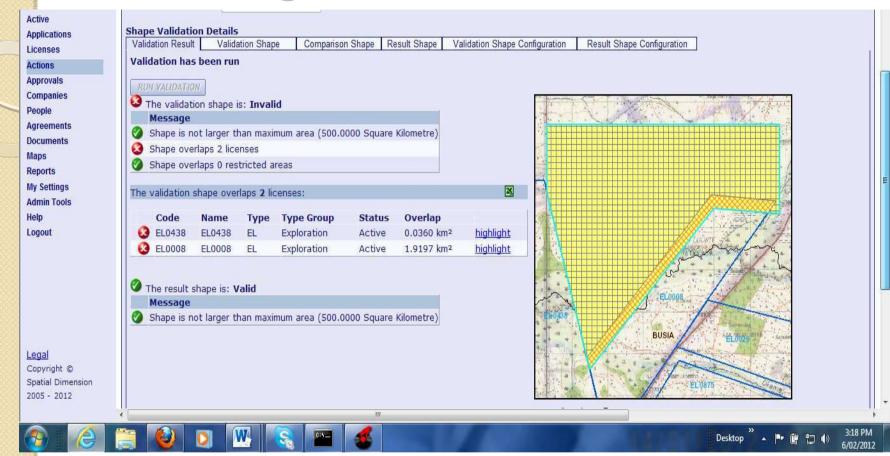
- The system treat simultaneously and interactively the spatial and Non-spatial data of Specific GIS (ArcGIS) and database application

Challenges/ issues: Coordinate system transformation

Challenges/issues

Challenges: implementation of discretional powers

-License renewal

On the road

- Completion of data clean up
- Go Live Phase
- Scan and upload of documents related to mineral rights
- Integration-Allows for seamless integration with external systems like GMIS
- External stakeholders workshop

FUTURE AND PROSPECTS OF MCRS

- A fully functioning IT department
- A fully connected network
- Flexi-cadastre is a server based enterprise solution, thus requirement for its maximum performance
- System maintenance (software, Hardware and Human Resource)
- Training and more training esp. in areas of system support

THANK YOU FOR YOUR ATTENTION

MCRS