

IM4DC

Action Research Report

SUMMARY

Researchers:

Vaclav Metelka and Mark Jessell

School/Centre:

Centre for Exploration Targeting

University/Institutions:

University of Western Australia

Key themes:

Operational effectiveness

Key countries:

Benin, Nigeria, Cameroon, Gabon, Equatorial Guinea, Republic of Congo, The Democratic Republic of Congo, Central African Republic, Chad and South Sudan

Completion:

October 2013

Research aims:

This research sought to develop and update a web-based open data application to present geoscientific and mining-related data from nine central African countries.

For further information on this action research:

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Online resource:

<http://im4dc.org/resources/im4dc-opendata/>

IM4DC Open Data – A Central-African Geodata Information System

Information sources relevant to geosciences and mining remain scarce, badly organised, badly maintained and poorly accessible. This means that countries in this region are not able to effectively manage their own resources and attract potential exploration activity.

The IM4DC Open Data application, built with IM4DC funding, was launched in September 2013 as an open access geospatial information online system, which aims to present geoscientific and mining-related data from nine central African countries (Benin, Nigeria, Cameroon, Gabon, Equatorial Guinea, Republic of Congo, The Democratic Republic of Congo, Central African Republic and Chad). It has the potential to form the basis of future collaboration between Central African countries and operate as a standard geospatial information exchange platform. The server has been deployed using a web-based GIS system built entirely on open source components and technologies. The IM4DC Open Data application provides developing countries with the capability to utilise the database at minimal software cost.

A second IM4DC project upgraded the capabilities and usability of the system and added new data sets. It also expanded the country footprint to include South Sudan. Site visits to the Central African countries of the Republic of Congo and Gabon were made to increase the amount of data in the database and promote the existence of the server in those countries. Several new layers were acquired for the two respective countries and the data were uploaded to the server.

All available software upgrade options were considered and tested, and the application has been integrated into the im4dc.org domain at <http://im4dc.org/resources/im4dc-opendata/>. The technology is transferable to other developing regions globally.

During the visits to the participating countries, it was again ascertained that agreements are needed between IM4DC and the data providers (geological surveys, ministries). The country representatives are keen to cooperate and provide at least metadata for the system. They are also excited about IM4DC training programmes. The universities and their staff welcome research cooperation between universities in Australia and their own organisations. The overall aim is to generate enough momentum to facilitate collaborative research and training programs similar to those currently occurring in the West African Exploration Initiative.