# METADATA DATABASE BUILD-UP AND MANAGEMENT IN DGM OF LAO PDR.

BY

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#### **Outline**

I. THE EXISTING DIGITAL DATA SETS II. PILOT AREA OF LAOGDB III.DATA ENCODING AND MANAGEMENT IV.CHALLENGES AND SOLUTION

#### I. EXISTING DIGITAL DATA SETS

The existing digital data sets are collected into the Lao Geological Database(LAOGDB) hosted at the Department of Geology and Minirals

#### II. PILOT AREA OF LAOGDB

- (1) BASE DATA.
- (2) GEODATA.
- (3) MINING CADASTRE.
- (4) OIL AND GAS DATA.
- (5) DIGITAL REPORT LIBRARY.

# III. DATA ENCODING AND MANAGEMENT (1) BASEDATA

#### **Database of GIMS in using**

- Topographical map (1:100 000 scale)
- Administrative borders \ Land use
- Digital elevation model
- Contours
- Rivers
- Lakes
- Roads (classified)
- Small objects (village, schools, etc
- Protection area
- Map sheet divisions (all data combine by MapInfo and ArcGIS sofware)

## (2) GEODATA

# The Geodata includes geological map (many format)

- 1:1M scale geological map with structures
- 1:500 000 scale geological map with structure from Southern Laos (9 map sheets)
- 1:200 000 scale geological map with structure from Mid-Lao (8 map sheets)
- 1:200 000 scale geological map with structure from Northern-Lao (15 map sheets)
- 1:200 000 scale geological map with structure from Vientiane sheets
- 1:100 000 scale geological map with structure ( 28 map sheets) soil map
- . Mineral deposit database

## (3) MINING CADASTRE

The Mining Cadastre consists
The area layers Complemented
with related attribute data tables

- Prospecting Area
- . Exploration Area
- Exploitation Area

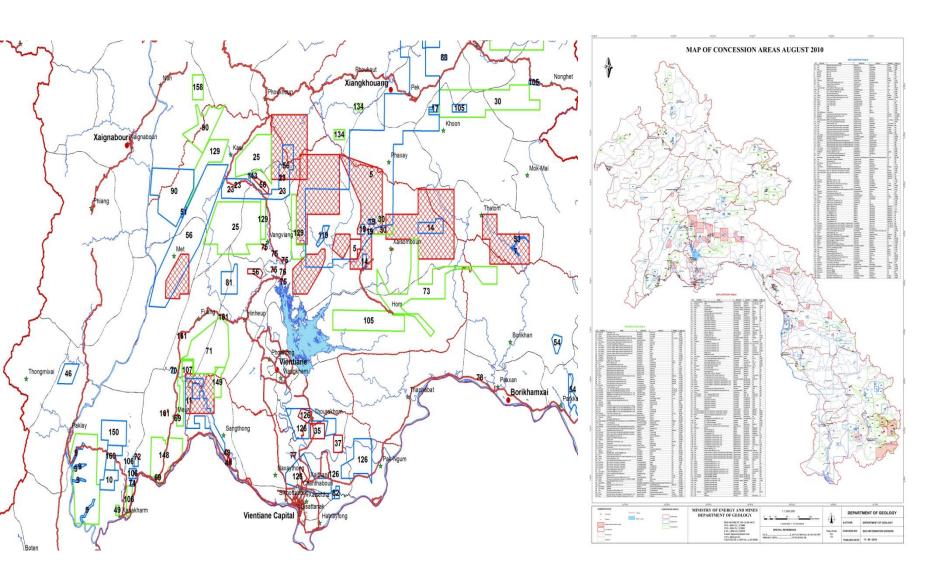
### (4) OIL AND GAS DATA.

- Exploration report and maps
- Drilling report and maps
- Magnetic taps
- .CD, DVD

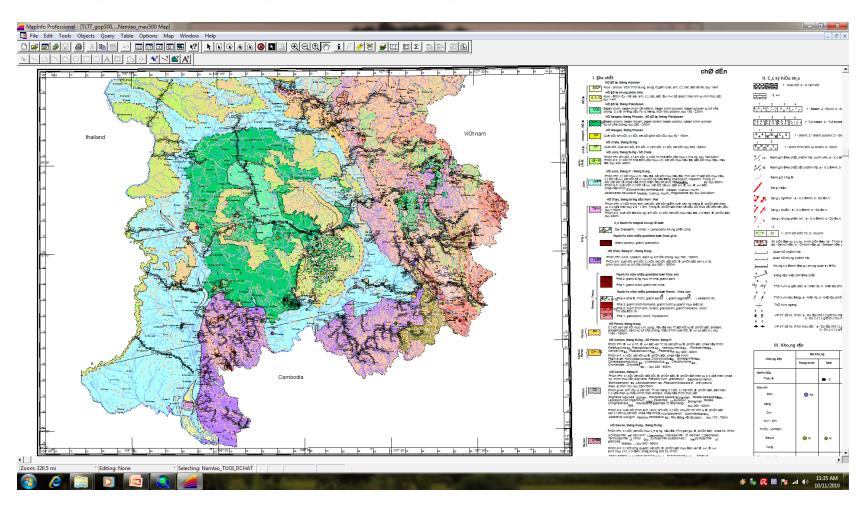
## (5) DIGITAL REPORT LIBRARY.

- Was developed by compiling the existing digital geological reports
- Several hard-copy reports of which some were available at DGM only as one copy
- These reports, representing the key publications on geology of Lao PDR

#### **CONCESSION AREA MAP 2010**



# Completed convert from MapInfo to ArcGIS Cooperation project conered by 4 provinces (Southern park of Lao) at scale 1:500 000



#### III CHALLENGES AND SOLUTION

#### 1. Challenges:

- The base data, original map produced in Vientiane 82 coordinate system.
   Digitized by NGD
- Many format in the geodata on mapInfo format transfer into ArcGIS shape file and upgraded to Laonat 96 & to WGS 84
- Problem: Now several coordinate
   System in the use often coordinate
   system is not defined or wrongly defined

#### 2. Solution.

 Have uniform database and one coordinate system used by all at all data

#### THANK YOU!