



# Oil and gas database management

Shinji Kanai

Japan Oil, Gas and Metals National Corporation  
(JOGMEC)

- ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY(AIST)
  - Geological survey of Japan(GSJ)
  
- Japan Oil, Gas and Metals National Corporation (JOGMEC)

(1) Oil and natural gas

(2) Metal

- \* financial assistance
- \* technology development and technical support
- \* stockpiling
- \* gathering/providing information
- \* mine pollution control and overseas field survey
- \* Overseas Field Survey

## Data Management Policy & Strategy

JOGMEC has been managing and using several databases for over 20 years, and will continue using in the future. JOGMEC uses other companies' database except one database :TERDIS.

NDR      Data repository for raw data      (digital data)      -----

TERDIS      Index database for technical report (paper)      -----

Usage of commercial database abroad

## NDR (National Data Repository)

1999 Pre-Operation

2000 beginning of operation (Data Server – outside of JOGMEC)

2004 (Data Server -- inside of JOGMEC)

Present still in operation

## TERDIS (Technical Report Data and Information System)

1990 beginning of operation (Unix & Oracle)

1998 (Windows & Oracle)

Present still in operation

## Others (commercial database)

1990's Start using databases by computer

*The Japan NDR provides Web-based access to multiple data types and datastores.*

- to manage JOGMEC's seismic and well data
- to reduce the time and effort of data retrieval
- to unify JOGMEC's raw data management system
  
- Using the commercial software and database

Data Repository for:

## Well

- Location Info
- Well Info
- Log (LIS, DLIS, LAS)
- Well Marker

## 2D/3D Seismic

- Navigation
- Trace Data (SEG Y)

## Document

- Reports  
(PDF, WORD, EXCEL)
- Image (TIF)

## TERDIS(Technical Report,Data and information system)

*TERDIS is for Various technical report .*

- to store the index information of Technical report
- book management
- to manage the lending service
  
- JOGMEC created the TERDIS.

Index data for:

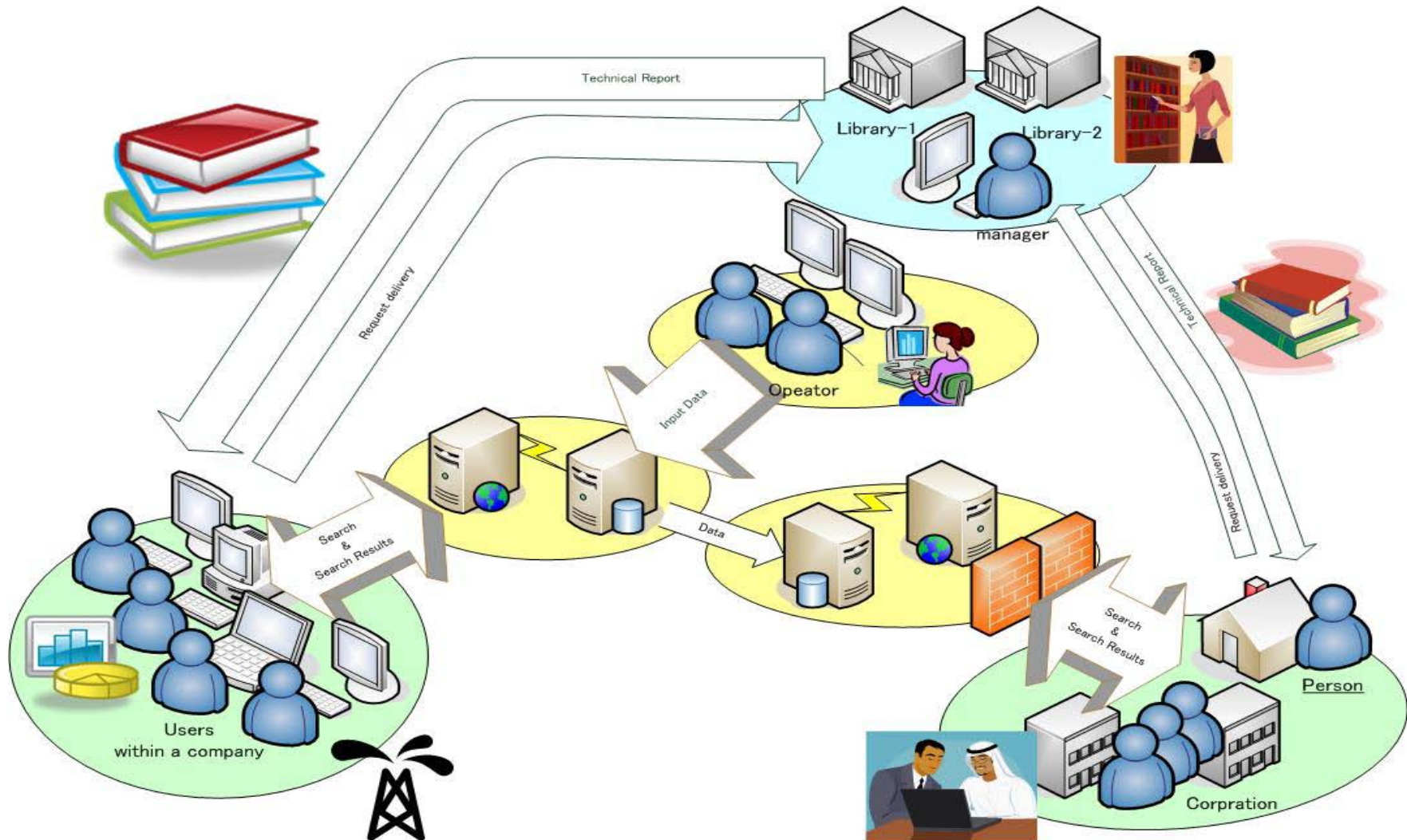
### **Report**

- Technical report
- Evaluation report for projects, etc
- Daily, Monthly report
- others

### **Map**

- Geological map
- others

# Data flow & access (TERDIS)





- OS  
Windows2003, Solaris, Linux
- Database  
Oracle
- GIS tool  
ESRI
- Web Browser

JOGMEC had not designed and used metadata.

Metadata design & structure

No activities

International standard used (if any)

POSC Epicenter

1997 and 1998 investigated

Did not use

- Present
  - Quality problem
  - Typing error
  - Data copy error
  - No QC check section (or personnel)
  - Master data management
  
- Future
  - QC check section (or personnel)
  - reviewing data entry flow
  - drawing maps after data entry

- Data accumulation
- Higher quality control
- To use GIS interface
- Utilization of data among databases
  - Drawing up one map using from various databases

Thank you for your attention !