DEVELOPMENT OF A WEB-BASED
CADASTRAL SURVEY PROJECT MANAGEMENT INFORMATION SYSTEM
IN SUPPORT OF THE LANDS MANAGEMENT BUREAU OF THE PHILIPPINE GOVERNMENT

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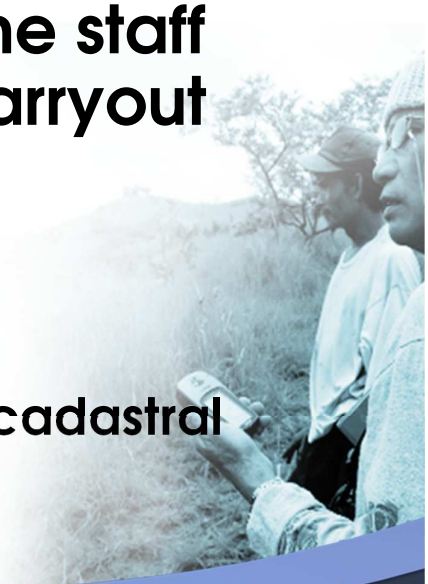
Lands Management Bureau (LMB): Mandate on Cadastral Survey

Pursuant to Executive Order (EO) No. 192, LMB serves as the staff bureau of the DENR to carryout the functions on:

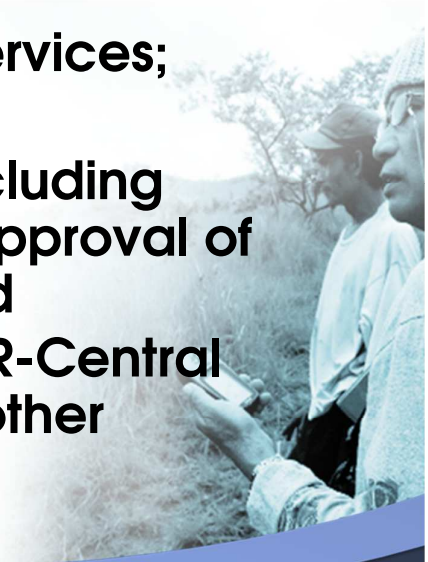
- ✓Planning;
- ✓Policy development; and
- ✓Monitoring and evaluation of cadastral surveys, among others.



Role of the Lands Management Services (LMS) on Cadastral Survey Program Implementation

Manage the following:

- ✓Procurement of consulting services;
- ✓Contract administration;
- ✓Operations management including inspection, verification and approval of surveys (IVAS) processes; and
- ✓Submission of reports to DENR-Central Office through the LMB, and other higher authorities.

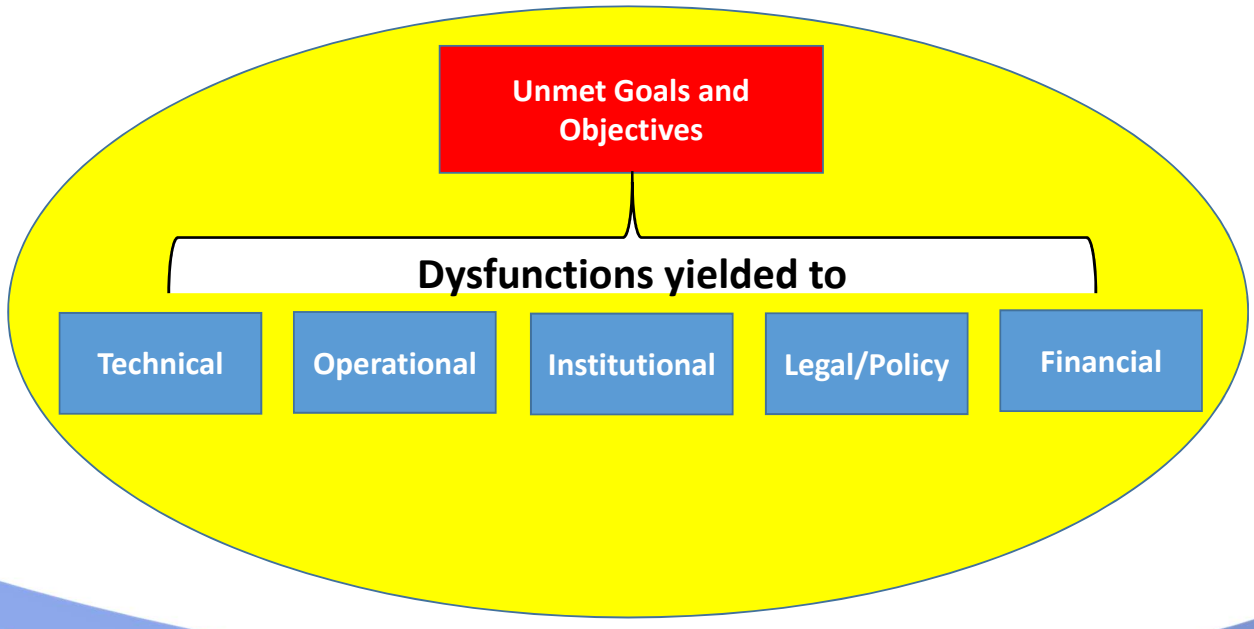


The Marching Order of His Excellency President Benigno Simeon Aquino III

Hasten and complete the Cadastral Survey Program of the country!

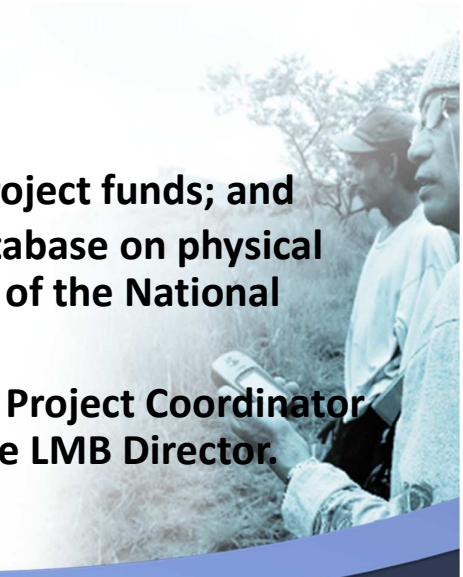
- The Program mirrors the government's seriousness to pursue programs that bring immediate and substantial benefits to the poor.
- It aims to contribute to the poverty alleviation thrusts of the Aquino Administration on land distribution.

Implementation Issues in Broad Themes



Cadastral Survey Program Management

1. **The National Cadastral Project Coordination Office (NCPCO), created pursuant to DENR Memorandum Order No. 2011-03, is responsible to the following:**
   - ✓**Preparation of work and financial plan;**
   - ✓**Coordination;**
   - ✓**Monitoring;**
   - ✓**Submission of reports;**
   - ✓**Facilitation of the timely releases of project funds; and**
   - ✓**Establishment and maintenance of database on physical and financial status of implementation of the National Cadastral Survey.**
2. **NCPCO is headed by a National Cadastral Project Coordinator (NCPC) under the direct supervision of the LMB Director.**



Project Management Information Needs

- Develop and operationalize appropriate project management tools to satisfy and sustain the operational requirements of all phases of work at all levels.
- Continuous use and exchange of reliable data or information are crucial in policy development, planning, and decision making.

*Hence, the **Cadastral Survey Project Management Information System (CSPMIS)** was considered for design and development.*

The Service Provider: RSV Geoconsulting and Management Services (RSV-GEMS)

A sole proprietorship firm engaged in:

✓Surveying and Mapping Services
✓Geographic Information and Communications Technology (Geo-ICT) Solutions
✓Among others

Project Objectives

- To develop a project management tool which will be utilized by the End-users from the LMB and LMS in the Regional Offices;
- To achieve an improved internal capacity for a functional near-real time monitoring and better feedback mechanism; and
- To enhance transparency and accountability in cadastral survey project management.

Role of RSV-GEMS (In collaboration with LMB and LMS Offices)

- ✓Design and develop a Web-based CSPMIS in support to cadastral survey project management;
- ✓Establish in-house capability concerning the utilization of CSPMIS at the LMB and LMS offices;
- ✓Develop the implementing guidelines for the utilization and maintenance of the CSPMIS consistent with the ICT policy of the DENR; and
- ✓Prepare and submit reports, system technical documents, Users' Manuals, and training materials.

System Modules Covered

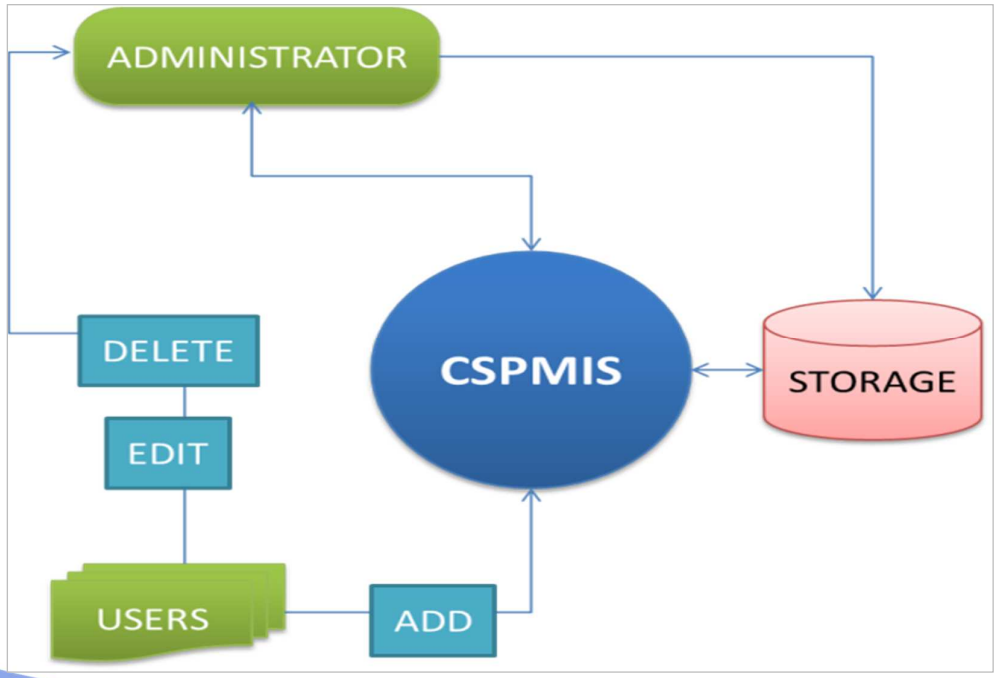
- Project Summary;
- Service Provider's Profile (Sole Proprietorship, Corporate or Partnership);
- Profile of Government Geodetic Engineer In-charge;
- Procurement Process;
- Project Resources and Other Inputs;
- Contract Information and Management;
- Document and Action Tracking; and
- Physical and Financial Reports.

Scope of Work and Schedule

ITEM NO.	SCOPE OF WORK/COMPONENT ACTIVITIES	DURATION (MONTHS)					
		1	2	3	4	5	6
1	System Analysis	■					
2	Database Design		■				
3	System Design and Development		■	■			
4	Evaluation and Modification			■	■		
5	Integration and Operationalization				■		
6	Capability Building	■		■		■	
7	Preparation of Implementing Guidelines			■	■	■	
8	Documentation and Turn-over	■	■	■	■	■	■

IV. Implementation Approach

Context Diagram



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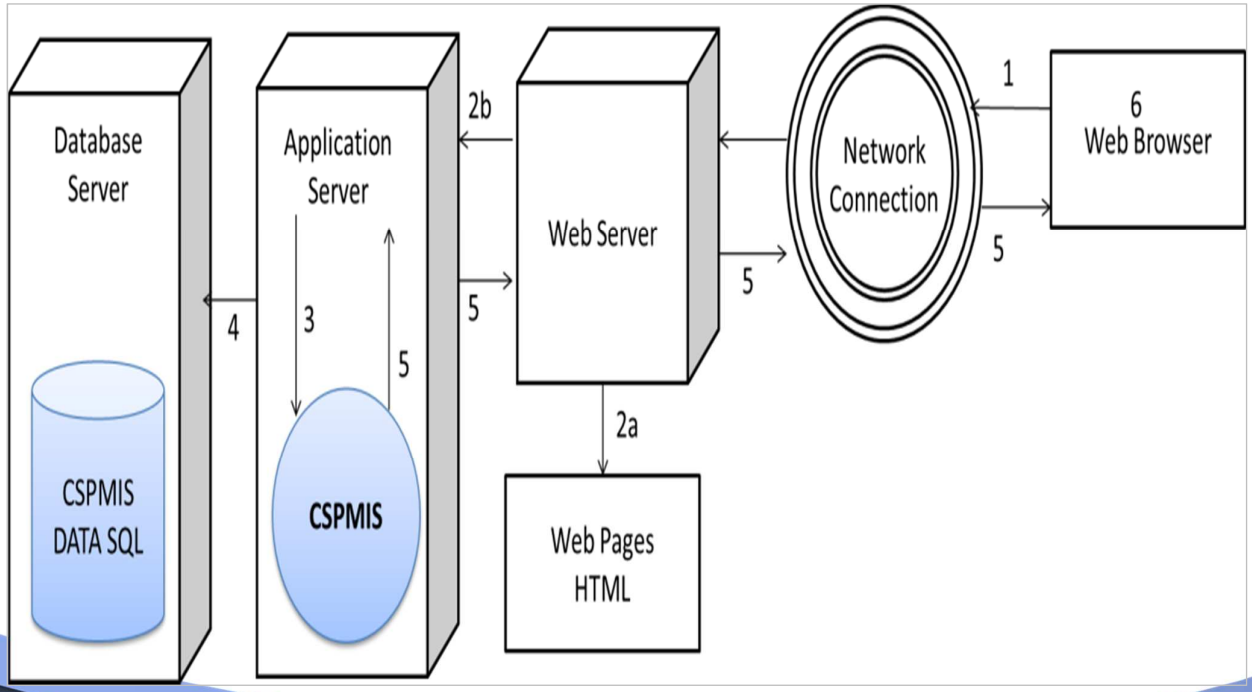
IV. Implementation Approach

System Architecture



Statement on Work Completion

- Proto-type version developed within two (3) months;
- End-Users given 14 days to evaluate the Proto-type;
- CSPMIS completed in six (6) months time;
- Installed and made operational in a Server environment;
- Accomplished an orientation kick-off meeting/seminar, two (2) training programs, two (2) workshops and series of focus group discussions on policy development;
- Prepared technical documents, Users Manuals, training materials, and reports; and
- Complied with after-sales support is three (3) months from the date of turn-over of deliverables.

General System Features

- User friendly;
- Selected data fields have input validation;
- Converts data into different file formats;
- Compatible with all operating system platforms;
- Contains advance search functionality;
- Contains security features such as login page, setting of User's permission and others for the protection of data and information;
- System operation is governed by implementing guidelines;

General System Features

- Operates in real-time - Users may receive data and information once these are uploaded or published;
- Provides outputs by generating Web pages;
- User interface accepts inputs via devices such as iPods and smart phones;
- System is accessible to Users over a Network such as Internet or an Intranet through a Web Browser;
- Single installation through the LMB Web Server; and
- Usable by multiple and concurrent Users nationwide.

System Administration

- NCPC presently acts as the System Administrator (SA).
- MIS Unit provides technical assistance to the SA.
- Administrator Page is provided solely for use by the SA.
- SA can set User's permissions and privileges in using the system.
- A "Listbox" is used to cluster, assign, authorize and add/delete User groups.

Initial Impact

- Availability of data for project study, planning, monitoring and evaluation, and impact assessment;
- More detailed overall project profile and status together with the required documentary attachments are now available and accessible;
- Better monitoring system and feedback mechanism as information on issues and concerns needing immediate intervention became available and easily accessible;
- Increase in number of personnel that are capable of utilizing the system in support of project management;
- Assurance of minimizing unnecessary delays which will contribute to better time and fiscal management;

Initial Impact

- Enhanced internal and external coordination and implementation arrangements;
- Increased internal capacity in project management and improved productivity;
- Enhanced transparency in some regions viz internal control and field operations from procurement until project turn-over; and
- Initial improvement in terms of accountability mechanism for all officials and employees directly involved in the project.

Lessons Learned

- There is no amount of brilliant public investment managers that can assure the government to effectively and efficiently manage the cadastral survey projects without using real, up-to-date, and reliable data and information;
- The use of ICT solutions such as the Web-based CSPMIS redounds to the project's initial impacts and benefits which evidently outweigh the cost of investment; and
- Among the major challenges are the commitment and dedication of the employees and officials who are directly involved in CSPMIS operationalization.

Thank you for listening!

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