



❶ Technical Bulletin

This Technical Bulletin provides a systematic procedure for the proper adoption and implementation of the Forestry Information System (FIS) nationwide in the DENR. The FIS is an integration of computer-based system modules. Forestry data on holder profile and basic information, development plans and accomplishments reports of tenured areas are stored and integrated from community, provincial, regional up to the national levels of the DENR organizational hierarchy in a systematic manner, guided by standards, and supported by the appropriate computer systems.

❷ Forestry Information System (FIS)

The developed Information System (IS) modules for FIS are based on the following licenses, leases, permits, contracts and certificates issued to the development partners of DENR in the management, protection and conservation of the forest:

- a. FIS-Geographical Information System (FIS-GIS)
 - Production and Integration of Projected/Rectified GIS Maps
- b. Community-based Forest Management Project IS
 - Community-based Forest Management Agreements (CBFMA)
 - Certificate of Stewardship Contracts (CSC)
 - Forest Land Management Agreements (FLMA)
 - Community Forest Management Agreement (CFMA)
 - Community Forest Stewardship Agreement (CFSA)
 - Mangrove Forest Stewardship Agreement (MFSA)
 - Protected Area Community-based Resource Management Agreement (PACBRMA)
 - Reforestation Contracts
- c. Plantation Forest Management IS
 - Integrated Forest Management Agreements (IFMA)
 - Socialized Industrial Forest Management Agreements (SIFMA)
 - Industrial Tree Plantation Lease Agreements (ITPLA)
 - Tree Farm Lease Agreements ((TFLA)
 - Agro-forestry Farm Lease Agreements (AFFLA)
- d. Timber License Agreements IS
 - Timber License Agreement (TLA)
- e. Forest Land Grazing Management IS
 - Forest Land Grazing Management Agreements (FLGMA)
 - Pasture Lease Agreement (PLA)
 - Pasture Permits
- f. Special Forest Land Use IS
 - Special Land Use Permits (SLUP)
 - Special Land Use Lease Agreements (SpLULA)
 - Special Forestland Use Agreements (FLAg)
 - Forestland Use Agreements for Tourism (FLAg-T)
- g. Private Land Forest Management IS
 - Private Forest Development Agreement (PFDA)
 - Certificate of Timber Plantation Ownership (CTPO)

③ The FIS as a Management Tool

The FIS manages the tremendous quantity of data that are generated from the major forestry activities and transform them into meaningful information that will provide support for the effective supervision and monitoring of all these projects and planning future interventions. An updated FIS database is an effective management tool in the monitoring and assessment of the forest. The FIS has the following capabilities:

- access to information on the status of forest and the resources within including identifying areas and opportunities for further investments in and development of the Philippine forestry sector where such will benefit the most;
- generate the holder's general information, management and development plans, accomplishments and status of concerned forest areas;
- generate pertinent information by utilizing the dynamic query function relative to the data requirement of the management;
- transform generated queries into electronic spreadsheet that can be tabulated into desired format;
- provide relevant information on the status of any holder with regard to compliance with the terms and conditions and standing of fees and charges paid;
- match-up accomplishments with management and/or development plans;

An active holder with no updates in the FIS Database may be construed as a non-complying holder in the submission of the required reports pursuant to the terms and conditions of their license, lease, permit, contract and/or certificate OR the concerned CENRO does not monitor the activities of these holders. It is important that the record of the tenured holder must be updated once the reports have been verified.

④ The FIS Process Flow

The tabulated FIS process flow is attached in Annex "A".

⑤ Transitory Clause

The Enhanced Forestry Information System (e-FIS) shall be developed to include the National Greening Program (NGP) that shall transform the current FIS from client-server to web-based and that shall link these applications to geographical data for better statistically-based decision making purposes.

In the event that the FIS is undergoing an enhancement, the foregoing FIS process flow shall be implemented and adopted until such time that the e-FIS has been rolled out nationwide. For newly acquired computer system with operating system other than Microsoft® Windows XP, it is recommended to establish Microsoft® Virtual XP mode and Oracle® Virtual Box, for Microsoft® Windows 7 and 8 operating system, respectively into the computer system to install and run the FIS.

The FIS installation guide is attached in Annex "B".

⑥ Conclusion

An updated FIS is an effective management tool that may assist the Department in placing every hectare of forest area under appropriated management system and tenure for the sustainable management of the forest.

Adoption and Implementation of the Forestry Information System (FIS)
PROCESS FLOW

DATA SOURCES	CENRO	PENRO	REGIONAL OFFICE	FMB
<p>Documents and Reports</p> <ul style="list-style-type: none"> Registration/Application Forms Approved Licenses/Leases/ Permits/Contracts Approved Certificates of Timber Plantation Ownership Analogue/digital Maps Community Resource Management Frameworks Resource Use Plans Land Use and Development Plans Comprehensive Development and Management Plans Approved Work Plans Approved Operations Plans Approved Management Plans Accomplishment Reports Inventory Tally Sheets Auxiliary Forms Certificates of Verification Cutting Permits Transport Permits Official Receipt of Payments Other relevant documents as may be required by the higher authority 	<p>CENRO Technical Divisions/ Sections/Units</p> <ul style="list-style-type: none"> Monitor, assess and review the activities and accomplishments of the concerned licensee/ lessee/ permittee/ contractor and other related partners in the sustainable management of the forest Evaluate the status of compliance of the licensee/ lessee/ permittee/ contractor and other related partners as to the terms and conditions of their respective licenses/ leases/ permits/ contracts and/or certificates Coordinate with the FIS Focal Unit the results of evaluation and prepare recommendations for suitable action Transform the data to the prescribed FIS Manual Data Entry (MDE) Form (Data capture formats known as FIS Manual Data Entry (FIS-MDE) Forms were devised to transform the holder's data from the documents/reports for encoding in the system) Review for accuracy and completeness of the accomplished FIS-MDE Form Forward the FIS-MDE Form to the CENRO FIS Focal Person for posting to the CENRO FIS database 	<p>PENRO Technical Divisions/Sections/Units</p> <ul style="list-style-type: none"> Monitor, assess and review the activities and accomplishments of the concerned licensee/ lessee/ permittee/ contractor and other related partners in the sustainable management of the forest Evaluate the status of compliance of the licensee/ lessee/ permittee/ contractor as to the terms and conditions of their respective licenses/ leases/ permits/ contracts and/or certificates Coordinate with the FIS Focal Unit the results of evaluation and prepare recommendations for suitable action 	<p>Regional Office Technical Division/Sections/Units</p> <ul style="list-style-type: none"> Monitor, assess and review the activities and accomplishments of the concerned licensee/ lessee/ permittee/ contractor and other related partners in the sustainable management of the forest Evaluate the status of compliance of the licensee/ lessee/ permittee/contractor and other related partners as to the terms and conditions of their respective licenses/ leases/ permits/ contracts and/or certificates Coordinate with the FIS Focal Unit the results of evaluation and prepare recommendations for suitable action 	<p>FMB Technical Divisions/ Sections/Units</p> <ul style="list-style-type: none"> Monitor, assess and review the activities and accomplishments of the concerned licensee/ lessee/ permittee/contractor and other related partners in the sustainable management of the forest Evaluate the status of compliance of the licensee/ lessee/ permittee/ contractor as to the terms and conditions of their respective licenses/ leases/ permits/ contracts and/or certificates Coordinate with the FIS Focal Unit the results of evaluation and prepare recommendations for suitable action
				FIS Focal Unit (Forest)

DATA SOURCES	CENRO	PENRO	REGIONAL OFFICE	FMB
	<p>FIS Focal Unit</p> <ul style="list-style-type: none"> Post the accomplished FIS-MDE Form to the CENRO FIS database Manage and maintain the CENRO FIS database including the hardware and application software Coordinate and make available updated holder information with the CENRO Technical Divisions/ Sections/ Units for evaluation and validation Prepare back-up files of the CENRO FIS database quarterly Submit the CENRO FIS database quarterly back-up files to the PENRO on or before the 7th day of the month after the reference quarter 	<p>FIS Focal Unit</p> <ul style="list-style-type: none"> Integrate the submitted CENRO FIS database back-up file quarterly Manage and maintain the PENRO FIS database including the hardware and application software Review the PENRO FIS database for consistencies and completeness of the records Inform the CENRO for any inconsistencies of the information in the FIS database Coordinate and make available updated holder information with the PENRO Technical Divisions/Sections/Units for evaluation and validation Monitor the adoption and implementation of FIS within the Province Prepare back-up files of the PENRO FIS database Submit the PENRO FIS database back-up files to the Regional Office on or before the 15th day of the month after the reference quarter 	<p>FIS Focal Unit</p> <ul style="list-style-type: none"> Integrate the submitted PENRO FIS database back-up file quarterly Manage and maintain the Regional Office FIS database including the hardware and application software Review the Regional FIS database for consistencies and completeness of the records Inform the CENRO thru the PENRO for any inconsistencies of the information in the FIS database Project and rectify analogue maps into GIS maps in accordance with the set standards Prepare complete mapping of GIS maps Coordinate and make available updated holder information with the Regional Office Technical Divisions/ Sections/Units for evaluation and validation Conduct regular regional assessment of the adoption and implementation of the FIS Prepare back-up files of the Regional Office FIS database Submit the Regional Office FIS database back-up files and GIS maps to the Forest Management Bureau on or before the last day of the month after the reference quarter 	<p>Policy, Planning and Knowledge Management Division</p> <ul style="list-style-type: none"> Integrate the submitted Regional Office FIS database back-up file and GIS Maps quarterly Manage and maintain the National FIS database and GIS maps including the hardware and application software Review the National FIS database and GIS maps in coordination with the FMB Divisions for consistencies, completeness and seamlessness Inform the Regional Office for any inconsistencies of the information in the FIS database Ensure the accuracy, reliability, completeness and timeliness of the FIS database Make available the FIS general-use information to all FMB Divisions and stakeholders for monitoring, policy formulation and decision making Review of the current system for necessary improvement as needed Conduct regular national assessment of the adoption and implementation of the FIS nationwide Prepare back-up files of the National FIS database

ANNEX “B”

FIS INSTALLATION GUIDE

A. FOR WINDOWS XP OPERATING SYSTEM

- 1. Install the MS SQL Server 2000**
- 2. Setup the Service Manager for SQL Server**
- 3. Setup the Enterprise Manager for SQL Server**
 - 3.1. Add FSIS database to SQL Device**
 - 3.2. Add FSIS log-in**
- 4. Setup the Open Database Connectivity (ODBC)**
- 5. Install the FIS Main Program**
- 6. Install the FIS Database Integrator Program**
- 7. Setup the Regional Setting of the computer**
- 8. Install the update.bat**
- 9. Install the updater**
- 10. Install the libraries update**

B. FOR WINDOWS 7

- 1. Determine the version and system type (32 or 64 bit) of the Windows 7 Operating System of your computer**
- 2. The Virtual PC is applicable only for 32 or 64 system type of Windows 7 Professional, Enterprise or Ultimate versions**
- 3. Download the Windows Virtual PC – Windows XP Mode installers from the website http://windows.microsoft.com/en-us/windows7/install-and-use-windows-xp-mode-in-windows-7#section_3**
- 4. Install the Virtual PC – XP mode into the computer**
- 5. Open the Virtual PC – XP mode and install the FIS**
- 6. Follow the FIS installation guide for Windows XP Operating System**

C. FOR WINDOWS 8

- 1. Download the Oracle Virtual Box for Windows hosts from the website <https://www.virtualbox.org/wiki/Downloads>**
- 2. Install the Oracle Virtual Box**
- 3. Open the Virtual Box**
- 4. Set-up the Oracle Virtual Box**
 - a. Install Windows XP into the Virtual Box**
 - b. Set-up the features of Virtual Box**
 - c. Install the FIS**
- 5. Follow the procedure of installation of FIS from the Windows XP Operating System**

NOTE: The step by step FIS installation procedure is incorporated in the FIS installer CD.



This material is produced by the Forest Management Bureau, Department of Environment and Natural Resources, FMB Building, Visayas Avenue, Quezon City, Philippines. April 2014