



MEMORANDUM

FOR/TO : All Regional Directors
All Assistant Regional Director for Technical Services
All PENROs and CENROs

FROM : The Director

SUBJECT : **FMB TECHNICAL BULLETIN NO. 21 - GUIDELINES IN THE CONDUCT OF AREA RECTIFICATION SURVEY OF OVERLAPPING TENURIAL INSTRUMENTS**

DATE : **MAY 03 2016**

Digital maps are becoming essential inputs in decision making and planning in various forestry programs. Thus, the Forest Management Bureau has undertaken the initiative to create an updated geospatial database of existing forestry tenure instruments. During the Nationwide Workshop on the Map Coding of Tenurial Instruments Shapefiles in 2015, overlapping shapefiles was identified as a key issue in the development of this geospatial database.

Objectives

- a. Provide guidelines in addressing the problems of overlaps, duplication and conflict areas within and among tenurial instruments.
- b. Serve as a guide for future survey and mapping of new tenurial instruments.

Users of the Technical Bulletin

The users of the technical bulletin are DENR field officers and personnel who are primarily involved in the survey and mapping of tenurial instruments.

Methodology

The conduct of the area rectification survey should not be limited to the identified overlaps and unmapped tenurial instruments during the Nationwide Workshop on the Map Coding of All Tenurial Instruments Shapefiles but also include problem areas encountered during the actual field survey.

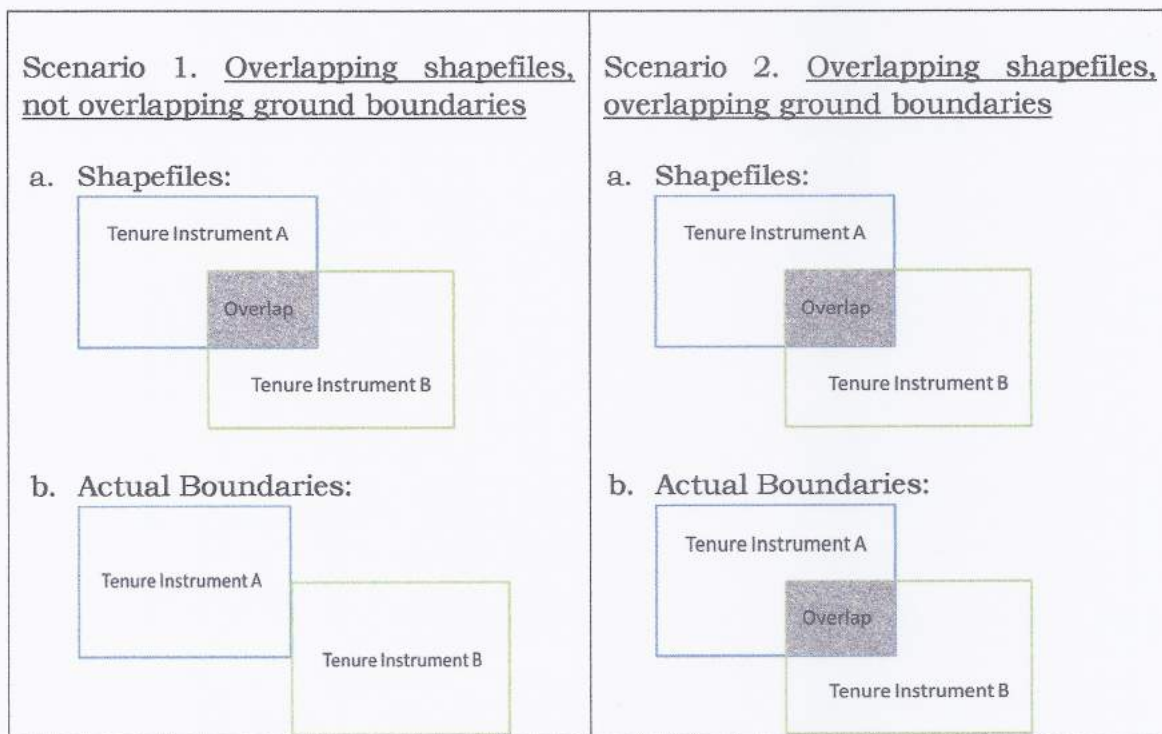
Area rectification survey shall be conducted in the presence of the tenure holders of conflicting instruments. The PENRO and CENRO, with technical assistance

from the region, shall create a composite technical team that will be responsible in the conduct of the survey mapping and planning at cost of PhP 450.00 per hectare.

The survey team shall use handheld Global Positioning System (GPS) receiver in the conduct of this activity. GPS-based data collection is more accurate and faster than conventional surveying and mapping techniques. The FMB Forest Geospatial Data Infrastructure Section under the Forest Policy, Planning and Knowledge Management Division has developed the *Field Survey using Handheld GPS Receiver* as guide in the survey.

The recommended methods in identifying and rectifying area overlaps are as follows:

1. Digitize analog maps of all the existing tenured areas using GIS software (ArcGIS is recommended). All created shapefiles must be set to WGS84 datum.
2. Identify all overlapping areas through topology. The input datum in the feature dataset where the topology was made must be set to WGS84 datum.
3. Select the overlapping polygons and convert it to KML format.
4. Upload the converted KML files to the handheld GPS receiver (Garmin Montana, Monterra, Etrex or any handheld GPS receiver that can support KML files and Garmin BaseCamp software for uploading are recommended).
5. In the GPS receiver, view the uploaded file in Track Manager. Locate the overlapping area using the uploaded files in the map page of the GPS.
6. Rectification can be done using the following scenarios as guides:



<p>c. Recommended Action: Survey team must identify and mark on the ground the correct corners or tie points for each tenure instruments.</p>	<p>c. Recommended Action: Survey team must mark the overlapping area as part of the tenure instrument that was first approved on the assumption that prior to the approval of a tenure instrument application, no existing tenure instrument are present in the proposed area.</p>
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7. The collected data will be downloaded to the computer, saved as .gpx file and converted to shapefiles (use the GPS Receiver Operational Manual as guide in uploading and downloading of data). The collected data will help the survey team in rectifying the shapefiles of overlapping tenurial areas.
8. A standard attribute table must be created for each shapefile to ensure its compatibility to the Enhanced-FIS database. See Annexes 1 to 3.

Expected Outputs

The rectified map shall form part of the lease agreement or permit and copy thereof shall be submitted to the Forest Management Bureau including:

1. Updated list of tenurial instruments per CENRO with the corrected area in hectares;
2. Updated and rectified maps of tenurial instruments with technical descriptions tied to the nearest PRS 92; and
3. Updated and rectified shapefiles of tenurial instruments with WGS 84 datum.

FOR INFORMATION AND GUIDANCE.


RICARDO L. CALDERON, CESO III



cc: All DENR Undersecretaries
 All DENR Assistant Secretaries
 All DENR Bureaus

Annex 1. Standard Attribute Table for Community-based Tenurial Instruments (i.e. CBFMA, CSC, CFSA, CFMA)

Required Field	Field Properties	Field Length	Description	Sample
TENURE	Text	30	Name of Tenurial Instrument	CBFMA
REGION	Text	50	Name of Region	I, II, III, ARMM, CAR, NCR
PENRO	Text	100	Name of PENR office	Nueva Ecija
CENRO	Text	100	Name of CENR office	Talavera
DISTRICT	Text	50	Congressional District	Lone District, I, II, III
MUNI_CITY	Text	100	Name of Municipality	Bongabon
BARANGAY	Text	100	Name of Barangay	Digmala
PO_NAME	Text	150	Name of the Peoples' Organization (PO)	Digmala Upland Farmers Association
PO_ALIAS	Text	30	Acronym of the PO	DUFA
PO_ADD	Text	255	Mailing Address of the PO	Digmala, Bongabon, Nueva Ecija
REG_AGENCY	Text	10	Name of Agency where the Organization was registered	CDA, DOLE, or SEC
REG_NO	Text	50	Registration Number	CN-200913957
REG_DTE	Text	30	Registration Date	June 13, 2009
CBFMA_NO	Text	30	CBFM agreement number	25017
DATE_ISSD	Text	30	Date the agreement was approved/issued	June 25, 2010
DATE_EXPD	Text	30	Date the agreement will expire	June 25, 2035
AREA_HA	Double	10,4	Area in hectares	25
WATERSHED	Text	255	Name of watershed where the tenurial instrument is located if any	Digmala watershed
REMARKS	Text	255	Other relevant Information	
TEN_CD	Text	5	Assigned Tenurial Code	01
PSGC	Text	10	Assigned Philippine Standard Geographic Code of CENRO or PENRO (if no CENRO)	012804
NO_OF_PAR	Text	5	Number of Parcels	02
SITE_ID	Text	5	Site ID Code	00015
AREA_CD	Text	6	Area Code	450000
UNIQ_ID	Text	30	Unique Code to be linked to the eFIS	01-012804-02-00015-450000

Annex 2. Standard Attribute Table for Non-Community-based Tenurial Instruments

Required Field	Field Properties	Field Length	Description	Sample Data
TENURE	Text	15	Kind of Tenure Instrument	SIFMA
CTRL_NO	Text	25	Agreement Number	SIFMA NO. 09-2009
NAME	Text	200	Name of Instrument Holder	Borthron Development Corporation (BDC)
REGION	Text	50	What Region (Roman Numeral)	III, IX, ARMM, CAR, NCR, IV-A,
DISTRICT	Text	50	What Congressional District	Lone District, I, II, III
CENRO	Text	100	Name of CENR Office	Talavera
PENRO	Text	100	Name of PENR Office	Nueva Ecija
BARANGAY	Text	100	Name of Barangay	Digmala
MUNI_CITY	Text	100	Name of Municipality	Bongabon
AREA_HA	Double	(10,4)	Area in Hectares	20.14414767
DATE_ISSD	Text	30	Date the Instrument was Issued	January 8, 2010
DATE_EXPD	Text	30	Date the Instrument will Expire	January 8, 2035
CONT_PERS	Text	50	Name of Contact Person	Juan dela Cruz
HOLD_ADD	Text	255	Address of Tenure Holder	#40 Rizal Street, Pasuquin, Ilocos Norte
REMARKS	Text	255	Other relevant information	
TEN_CD	Text	5	Assigned Tenurial Code	01
PSGC	Text	10	Assigned Philippine Standard Geographic Code of CENRO or PENRO (if no CENRO)	012804
NO_OF_PAR	Text	5	Number of Parcels	02
SITE_ID	Text	5	Site ID Code	00015
AREA_CD	Text	6	Area Code	450000
UNIQ_ID	Text	30	Unique Code to be linked to the eFIS	01-012804-02-00015-450000

Annex 3. Tenurial Code for each Tenurial Instrument

Tenurial Instrument	Tenurial Code
Community Based Forest management Agreement (CBFMA)	01
Integrated Forest Management Agreement (IFMA)	02
Socialized Industrial Forest Management Agreement (SIFMA)	03
Forest Land Grazing Management Agreement (FLGMA)/Forest Land Grazing Lease Agreement (FLGLA)/Pasture Lease Agreement (PLA)	04
Forest Land Use Agreement (FLAg)	05
Forest Land Use Agreement for Tourism Purposes (FLAgT)	06
Special Forest Land Use Lease Agreement (SPLULA)	07
Special Land Use Permit (SLUP)	08
Industrial Tree Plantation (ITP)	09
Tree Farm Lease Agreement (TFLA)	10
Agroforestry Farm Lease Agreement (AFFLA)	11
Timber License Agreement (TLA)	12
Community Stewardship Certificate (CSC)	13
Community Forest Stewardship Agreement (CFSA)	14
Community Forest Management Agreement (CFMA)	15
Forestland Management Agreement (FLMA)	16
Tree Farm Lease Management Agreement (TFLMA)	17
Mangrove Stewardship Agreement (MSA)	18