

Formatting Requirements for Plantation Boundary Data Submission Guidelines

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Boundary Data Submission Guidelines

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Introduction

The Roundtable on Sustainable Palm Oil (RSPO) requires Members who own and manage plantations to submit boundaries of their palm oil plantations for transparency purposes. As mandated by [Resolution 6g GA 10](#), members are also required to submit the boundaries of their milling operations, managed areas and scheme/associated smallholders.

To streamline the plantation boundary submission process, the RSPO strongly encourages members to maintain GIS capacity, and requests that members with access to GIS software follow this data submission guidance.

This guidance explains the data submission template that members should use in procedures that require plantation boundary submissions such as Annual Communication of Progress (ACOP) submission, membership application, disclosure submission, Remediation and Compensation Procedure (RaCP), New Planting Procedure and other procedures that requires plantation boundary data submission. Members should follow the general folder structure and naming guidance, and the shapefile attribute table guidance. This template can also be used as basis of other geospatial data submissions to the RSPO Secretariat.

This guideline also expands the opportunity for the growers to submit the data by having two options of file formats:

1. Shapefile (.shp) and its associated file extensions (.shx, prj, and .dbf).
Note: This dataset is not readable without the associated extensions.
2. Geodatabase (.gdb)

Other file formats such as KML, JPEG, PNG, PDF, DWG and TIFF will not be accepted.

Scope

The scope of data submission is mainly based on the compliance, procedure and/or requirement it is intended to fulfil.

For general purposes such as ACOP submission and boundary update, the submission must cover all oil palm growing operations globally, whether certified, uncertified, owned or directly managed by the parent company. For specific purposes such as RaCP and NPP, the data should be submitted as per the disclosed supply bases for the procedure.

The dataset must be grouped by supply base/s that are being, or to be audited for compliance with RSPO-related standards.

Coordinate system and projection

The default coordinate system acceptable for the data submission is as below:

Table 1: Default coordinate system

Item	Details
Projected Coordinate System	WGS 1984 World Mercator
Projection	Mercator
Datum	WGS84
WKID Code	3395
Authority	EPSG

Alternatively, due to the localised nature of the plantations, local projection and datum is acceptable (such as MAGNA Colombia Bogota (EPSG 3116) and SRGI2013 UTM Zone 49S (EPSG 9486), provided full coordinate system metadata, including projection, datum, and WKID code, is submitted to the Secretariat.

Coordinate format

For mill information, it is requested that all milling global facilities of your suppliers, whether certified or uncertified, are also submitted. The coordinates must be in decimal degrees format with the accuracy to at least six decimal places. The value of the coordinates must be between:

- Longitude (x): Between -180 and +180.
- Latitude (y): Between -90 and +90.

Example:

100.708132, 4.673595

17.935095, -94.731538

-74.011722, 10.101656

Naming convention and folder structure

A folder can contain all required datasets from each parent company, which can be more than one Dataset Group (refer Table 2).

a. Folder naming guide

The boundary data should be submitted in a folder with the following naming convention.

<MembershipNumber>_<Parent>_<Sector>_<Year>

Example:

1-0119-12-000-02_ABCGroup_Grower_2024

Table 2: Folder naming guidance

Folder Name Section	Description and Guidance																				
MembershipNumber	RSPO Membership number in the current year																				
Parent	Name of parent company																				
Sector	RSPO Membership sector Shortened name to use in the folder name:																				
	<table border="1"> <thead> <tr> <th>Membership sector</th> <th>Shortened name</th> </tr> </thead> <tbody> <tr> <td>Affiliate</td> <td>Affiliate</td> </tr> <tr> <td>Banks and Investors</td> <td>Banks or Investors</td> </tr> <tr> <td>Consumer Goods Manufacturers</td> <td>Manufacturers</td> </tr> <tr> <td>Environmental or Nature Conservation Organisations</td> <td>ECNGO</td> </tr> <tr> <td>Oil Palm Growers</td> <td>Growers</td> </tr> <tr> <td>Palm Oil Processors and/ or Traders</td> <td>Processors or Traders</td> </tr> <tr> <td>Retailers</td> <td>Retailers</td> </tr> <tr> <td>Social or Developmental Organisations</td> <td>SDNGO</td> </tr> <tr> <td>Supply Chain Associate</td> <td>SupplyChain</td> </tr> </tbody> </table>	Membership sector	Shortened name	Affiliate	Affiliate	Banks and Investors	Banks or Investors	Consumer Goods Manufacturers	Manufacturers	Environmental or Nature Conservation Organisations	ECNGO	Oil Palm Growers	Growers	Palm Oil Processors and/ or Traders	Processors or Traders	Retailers	Retailers	Social or Developmental Organisations	SDNGO	Supply Chain Associate	SupplyChain
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	Social or Developmental Organisations	SDNGO																			
Supply Chain Associate	SupplyChain																				
Year	Year of data submission to RSPO																				

b. Plantation boundary and mill naming guide

The boundary and mill data file should be submitted using the following naming convention:

Shapefile format:

<Subsidiary>_<SupplyBase>_<DatasetGroup>_<ProjectionDatum>.<FileFormat>

Example:

- ABCCompany_DEFEEstate_Grower_WGS84UTMZone48N.shp,
- ABCCompany_DEFEEstate_Grower_WGS84UTMZone48N.shx,
- ABCCompany_DEFEEstate_Grower_WGS84UTMZone48N.dbf and
- ABCCompany_DEFEEstate_Grower_WGS84UTMZone48N.prj

Geodatabase format:

< Subsidiary >_<SupplyBase>_<DatasetGroup>_<ProjectionDatum>.gdb

Example of feature classes name within the geodatabase:

- ABCAssociation_DEFEEstate_ISH
- ABCCompany_DEFEEstate_Grower
- ABCAssociation_DEFEEstate_SSH
- ABCCompany_DEFEEstate_MillPoint

File naming guidance can be referred to Table 3.

Table 3: Dataset file naming guidance

File Name Section	Description and Guidance	
Subsidiary	Name of subsidiary company	
SupplyBase	Supply base name	
DatasetGroup	Dataset group and its shortened name to use in the folder name:	
	Dataset group	Shortened name
	Oil Palm Growers palm oil plantations boundary	Grower
	Scheme smallholder palm oil plantations boundary	SSH
	Independent Smallholder palm oil plantations boundary	ISH
	Mill location (point)	MillPoint
Mill location (boundary)	MillPolygon	

File Name Section	Description and Guidance					
ProjectionDatum	Projection and datum of the dataset/feature. Refer Coordinate system and projection section.					
FileFormat	File format					
	<table border="1"> <thead> <tr> <th data-bbox="450 584 1046 638">File format</th> <th data-bbox="1046 584 1372 638">File Extension</th> </tr> </thead> <tbody> <tr> <td data-bbox="450 638 1046 1279"> Shapefile and its associated file extensions. <ul style="list-style-type: none"> • All listed extensions are required in every data submission. <ul style="list-style-type: none"> ▪ shp - main file that stores the feature geometry ▪ .shx - index file that stores the index of the feature geometry ▪ .dbf - dBASE table that stores the attribute information ▪ .prj - file that stores the coordinate system information • Each file must have the same prefix. </td> <td data-bbox="1046 638 1372 1279"> .shp, .shx, .dbf, and .prj </td> </tr> </tbody> </table>	File format	File Extension	Shapefile and its associated file extensions. <ul style="list-style-type: none"> • All listed extensions are required in every data submission. <ul style="list-style-type: none"> ▪ shp - main file that stores the feature geometry ▪ .shx - index file that stores the index of the feature geometry ▪ .dbf - dBASE table that stores the attribute information ▪ .prj - file that stores the coordinate system information • Each file must have the same prefix. 	.shp, .shx, .dbf, and .prj	
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Geodatabase	.gdb					

Data field and Attribute table structure

The fields in the attribute table for both shapefile and geodatabase are the same, as shown in Table 4, 5 and 6. A ready-to use attribute table template based on the attribute table structure listed in Table 3 can be obtained from this link: [RSPO Data Template for Shapefile Geodatabase file format](#) .

Table 4: Field list and attribute description for both plantation boundary and mill dataset

Field Name	Alias	Description	Data Type & field length	Example	Mandatory to fill in by
Section A: General fields for all dataset group					
MemberNum*	Membership Number	RSPO membership number	Text (50)	1-0014-04-000-00	All RSPO Members
Parent*	Parent Name	RSPO membership name	Text (254)	ABC Group	All submission
MemberCat*	Membership Category	Membership category of this polygon Attribute option: 1. Grower 2. Independent Smallholder 3. Scheme Smallholder 4. Outgrower 5. Scheme Outgrower	Text (254)	Pick from attribute option in Description column	All RSPO Members
MemberYear*	Membership Year	Year of RSPO membership is granted to the parent company	Short (4)	2016	All RSPO Members
Subsidiary*	Subsidiary	Subsidiary	Text (254)	PT XYZ	All RSPO Members
ManageUnit*	Management Unit	Management Unit name	Text (254)	PT Mentari Merah	All RSPO Members
SupplyBase*	Supply Base	Name of supply base	Text (254)	DEF Estate	All RSPO Members
SBType	Supply Base Type	Type of supply base. Attribute option: 1. Grower 2. Scheme smallholder (managed)	Text (254)	Pick from attribute option in Description column	Certified Member

Field Name	Alias	Description	Data Type & field length	Example	Mandatory to fill in by
		3. Scheme smallholder (non-managed) 4. Independent smallholder			
UOC*	Unit of Certification	Unit of Certification name	Text (254)	DEF Estate	Certified Member
Mill*	Palm Oil Mill	Palm Oil Mill name	Text (254)	DEF Mill	Certified Member
AreaHa	Area (ha)	Total land area of supply base/management unit in hectare (ha)	Double (Precision, scale: 10,3)	4500.053	All RSPO Members
AreaHaCert	Certified Area (ha)	Total certified area in hectare (ha)	Double (Precision, scale: 10,3)	500.055	Certified Member
RSPOPOID	RSPO PO ID	RSPO PO ID	Text (254)	RSPO_PO1000015524	Certified Member
CertBody	Certification Body	Name of certification body	Text (254)	Control Union (Malaysia) Sdn Bhd.	Certified Member
CertStatus*	Certification Status	Certification Status Attribute option: 1. Active 2. Suspended 3. Expired 4. Not Certified	Text (20)	Pick from attribute option in Description column	All RSPO Members
ICDate	Initial Certification Date	Date of initial certification	Date (YYYY-MM-DD)	2024-12-31	Certified Member
CertNumIC	Initial Certification Number	RSPO certificate number of initial certification	Text (254)	CU-RSPO-849855	Certified Member

Field Name	Alias	Description	Data Type & field length	Example	Mandatory to fill in by
CertNumCC	Current Certification Number	RSPO certificate number of current certification	Text (254)	CU-RSPO-849854	Certified Member
StartCC	Current Certification Start Date	Start date of current certification	Date (YYYY-MM-DD)	2024-12-31	Certified Member
EndCC	Current Certification End Date	End date of current certification	Date (YYYY-MM-DD)	2024-12-31	Certified Member
PermitType	Permit Type	Land development permit type (e.g. HGU/Land title/ IUP/ Land Lease)	Text (254)	Hak Guna Usaha	All RSPO Members
PermitDate	Permit Date	Permit expiry date	Date (YYYY-MM-DD)	2024-12-31	All RSPO Members
PermitNum	Permit Number	Permit number	Text (254)	SK HGU No. 29/HGU/BPN.RI/2010	All RSPO Members
State*	State	State of the concession (if applicable)	Text (254)	Johor	All RSPO Members
Province*	Province	Province of the concession (if applicable)	Text (254)	East Kalimantan	All RSPO Members
Country*	Country	Country of the concession	Text (254)	Brazil	All RSPO Members
RemarksG	Remarks by Grower	Remarks/ additional information from the company	Text (254)		If applicable
RemarksR	Remarks by RSPO	Remarks/ additional information from the RSPO Secretariat	Text (254)	Overlaps detected	If applicable

Field Name	Alias	Description	Data Type & field length	Example	Mandatory to fill in by
RaCPID	RaCP ID	ID from the Remediation and Compensation Procedure	Text (254)	RaCP-3486 (Generated by RSPO Secretariat after disclosure submission)	if applicable
Section B: Additional fields for ISH and SSH dataset					
FarmerName	Farmer Name	Name of the scheme or independent smallholder farmer. Multiple owner name to be separated by comma (,)	Text (254)	Single owner: Kartika Or Multiple owner: Syahirah, Azlyn, Mario, Mufasa	Independent Smallholder (ISH)
FarmerID	Farmer ID	The ID of the farmer. The input data can be any ID used by the Group Manager to identify the plot owner e.g. the identity card number	Text (254)	860403566210	Independent Smallholder (ISH)
PlotID	Plot ID	The ID of the plot. The input data can be any ID used by the Group Manager to identify the plot.	Text (254)	Maria A, or Kartika 69, or PLY2847	All RSPO Members (ISH)

Field Name	Alias	Description	Data Type & field length	Example	Mandatory to fill in by
Section C: Additional fields for both point and polygon mill data					
SBLong	Supply Base Longitude	Longitude (x) of supply base in WGS 1984 World Mercator	Double (Precision, scale: 10,6)	101.708250 or -101.708250	Mill only
SBLat	Supply Base Latitude	Latitude (y) of supply base in WGS 1984 World Mercator	Double (Precision, scale: 10,6)	1.634250 or -1.634250	Mill only

Note: Attributes in fields marked with the * symbol will be shown in GeoRSPO. Other attributes are stored in RSPO’s internal database and will not be disclosed to the public.

Important notes:

1. **Geospatial data shall be prepared by competent Geospatial professionals with working knowledge of GIS data structures and formats.**
2. To maintain data integrity and prevent spatial conflicts, a topology check must be performed to identify any overlapping concession boundaries. Any identified overlaps must be corrected prior to any data submissions. Overlapping polygons will cause errors in hectarage calculation, traceability, and monitoring activities.
3. Shapefiles must be organized within the **correct folder structure** and use **proper naming conventions** as listed in Table 1. If needed, please use underscores (_) to replace spacing.
4. Please ensure that the plantation/mill data are provided based on legal documents such as land tile, land deeds and/ or certified plan or official survey data.
5. Unrelated auxiliary data (e.g., rivers, roads, buildings, lakes) shall not be included in the submission.
6. If your organisation does not have oil palm concession, milling operations or scheme/associated smallholder dataset, **do not submit empty data template.**



The RSPO is an international non-profit organization formed in 2004 with the objective to promote the growth and use of sustainable oil palm products through credible global standards and engagement of stakeholders.



RSPO will transform markets to make sustainable palm oil the norm

FIND OUT MORE AT

www.rspo.org

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