

## Electronic Data Delivery (EDD) Guidelines

# Bathymetric/Topographic XYZ Survey Data Requirements

This document contains instructions for delivery of **bathymetric/topographic XYZ survey data**. The formatting described in this document applies to the following bathymetric/topographic xyz survey data type codes found in the CPRA File Naming Convention (FNC) document and Table 3 below: ELMBB, ELSBB, ELINB, ELSUR, BATHY, ISPCH, ELLID.

A data deliverable must contain:

1. A file containing XYZ data delivered as one of the following:
  - a. A single, clear text, comma delimited data file (\*.csv) that includes on row 1 the column headers, in this specific order, “X”, “Y”, “Z\_FT”, etc. (*see Table 2*) and subsequent rows will contain the appropriate data values.
  - b. A shapefile with fields, in this specific order, “X”, “Y”, “Z\_FT”, etc. (*see table 2*) and subsequent rows will contain the appropriate data values.
  - c. In the case of lidar data a LAS file (\*.las) can be submitted.

Data may be referenced using any horizontal coordinate system recognized by the European Petroleum Survey Group (EPSG). Elevation values must be referenced using vertical datum: NAVD88 (feet).

2. A text file named EPSG\_WKID.txt containing the EPSG Well-known ID (WKID) of the reference horizontal coordinate system (*see table 1*). (<https://epsg.org/>) Note: EPSG\_WKID.txt file must contain only the numerical WKID. (i.e., If the coordinate system used was “NAD\_1983\_StatePlane\_Louisiana\_North\_FIPS\_1701 WKID: 26981 Authority: EPSG,” only 26981 would appear within the EPSG\_WKID.txt file.)

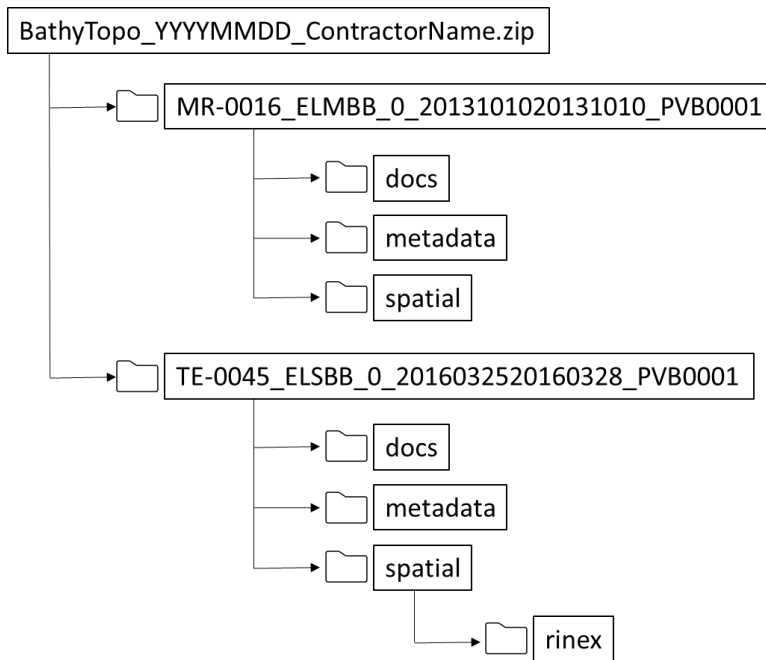
*Table 1: Commonly used horizontal coordinate systems*

<b>Horizontal Coordinate System</b>	<b>Units</b>	<b>WKID</b>
NAD_1983_StatePlane_Louisiana_North_FIPS_1701	Meters	26981
NAD_1983_StatePlane_Louisiana_North_FIPS_1701	U. S. Feet	3451
NAD_1983_StatePlane_Louisiana_South_FIPS_1702	Meters	26982
NAD_1983_StatePlane_Louisiana_South_FIPS_1702	U. S. Feet	3452
NAD_1983_UTM_Zone_15N	Meters	26915
NAD_1983_UTM_Zone_16N	Meters	26916
GCS_WGS_1984	Degrees	4326

3. metadata documents in \*.html and \*.xml format, and optionally, other supporting documents such as logs, reports, RINEX files, etc.

Delivered files will be compressed into a single \*.zip file named BathyTopo\_YYYYMMDD\_ContractorName.zip, where 'YYYYMMDD' is the date the data package was delivered to CPRA, 'ContractorName' is the name of the company that collected the data, and whose structure, and contents are defined below.

Figure 1: Zipped data package deliverable folder structure and contents example



- a. **“docs”** folder: Any associated file(s) that are not metadata, nor spatial data. Examples include logs, reports, etc. Any file in this folder must adhere to one of the following criteria:
  - i. a \*.pdf file, or
  - ii. a \*.jpg file, or
  - iii. a \*.zip file that contains one or more files and/or file type combinations. Use this option if a file is not a \*.pdf, nor a \*.jpg even if it is a single file.
- b. **“metadata”** folder: Metadata - FGDC compliant metadata in XML and HTML format and named using the File Naming Convention.  
The contractor must ensure the “Data\_Quality\_Information > Lineage > Process\_Step” sections of the metadata record covers the details of any data processing along with pertinent geodetic associated information (including but not limited to Horizontal Coordinate System, Vertical Datum, Geoid, Ellipsoid, Epoch, Vertical Benchmark, etc.). Metadata should clearly address the data collection process and clearly describe the units for any collected or sampled parameters.
- c. **“spatial”** folder: XYZ data as a comma-delimited \*.csv, or Esri shapefile, or LAS file, named using the File Naming Convention. Please see the Attribute Specifications table for field names and data types.  
Additionally, a text file named EPSG\_WKID.txt containing the EPSG Well-known ID (WKID) of the reference horizontal coordinate system must be included (<https://epsg.org/>).
- d. **“rinex”** folder (optional): Zipped Receiver Independent Exchange Format (RINEX) files.

Table 2: Attribute Specifications\* (csv and shp)

<b>Field Name</b>	<b>Description</b>	<b>Data Type</b>
X	X coordinate	Double
Y	Y coordinate	Double
Z_FT	Elevation (feet, NAVD88)	Double
Z_M	Elevation (meters, NAVD88)	Double
PROGRAM	Program (CWPPRA, LCA, STATE, ...)	Text
PROJECT	Project name or title	Text
PROJ_ID	Project number (state id, federal id,...)	Text
DATE_COLL	Date collected (YYYYMMDD)	Text
SURV_SPN	Survey shot point number	Double
PT_DESC	Survey point description: water shot, ...	Text
CONTRACTOR	Name of contractor that collected the data	Text
ORG	Organization that ordered the work	Text
COMMENTS	Special comments	Text

\*Note: Required csv and shapefile headers and columns (fields) of information are shown in table above and all columns must be in this order. Additional columns of information are acceptable as long as they are added after the required columns.

File Naming Convention elements are separated by underscores as follows:

**Element 1** Project: MR-0016 Mississippi River Delta Strategic Planning (Project ID)

**Element 2** Data Type Code: ELSBB (Bathymetry, Singlebeam data)

**Element 3** Place: 0 (Single 0 for data delivered to CPRA)

**Element 4** Date Range: 2013101020131010 (Data was collected on October 10, 2013)

**Element 5** Data Package Identifier: ZGS0001 (Z for XYZ data, 6 alphanumeric characters for data package identifier)

**Element 6** Optional: N/A (Since there is no optional value, the delimiter and any padding are eliminated.)

**Data package deliverable folder name (Example):**

**MR\_0016\_ELSBB\_0\_2013101020131010\_ZGS0001**