

Biodiversity GIS

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BGIS Data Submission Guidelines

For help or enquiries regarding data and metadata standards or completion of metadata forms, please contact the BGIS helpdesk as specified above.

In order to facilitate the process of site development and assist in the rapid deployment of biodiversity layers, we would appreciate submissions for BGIS include the following:

- A brief text (several paragraphs or so) outlining the project for the main project page on the website. The idea of this page is to give interested parties a brief insight into the motivation and outputs of the project. For an example, [see here](#).
- Any published project documents (in PDF or MS Word format) giving full details of the project that you would like to be distributed

For each map/layer to be put up on the website, we need the following:

- A brief text describing the map, its derivation and applicability. For an example, please [see here](#).
- A JPEG image of the map to demonstrate its appearance in a GIS application
- A metadata file in PDF/MS Word format
- A GIS file of the data, adhering to the BGIS data standards, as outlined below

- **Vector Data**

- Provided in Arcview/ArcMap shapefile or ArcInfo coverage format
- An *AVL or *LYR file (legend definition file) to standardise outputs
- Geographic projection (Lat/Long) with WGS84 Datum and Greenwich prime meridian

- **Raster Data**

- Provided in *E00 (ESRI raster export format), ESRI Grid, *IMG, *RST or *ASC format
- Preferably a legend file appropriate to the format to facilitate correct display (eg): *LYR file (ArcMap), *CLR file (ArcView)
- Universal Transverse Mercator 34S projection:

- WGS_1984_UTM_Zone_34S
- Transverse_Mercator
- False_Easting: 500000.000000
- False_Northing: 10000000.000000
- Central_Meridian: 21.000000
- Scale_Factor: 0.999600
- Latitude_Of_Origin: 0.000000
- Datum: WGS84

Additional Data Standards

Data quality (“clean” data)

All intersecting lines must be processed in GIS to remove overshoots and undershoots, (dangling arcs), “bowties” (or “fish tails”), and sliver polygons, resulting from incorrect closing of polygons. This is also a common problem where importing from GPS data.

Lines between adjacent polygons must be captured once only.

Large numbers of orphan and sliver polygons can cause significant slowdown of the web mapping service, reducing the usefulness of the service.

Base data

All significant contributing base data sources should be cited, in order to trace possible inaccuracies and updates

Base data used must be appropriate to the scale of operation.

Metadata Standards & Explanatory Text

File information

FILE NAME: The actual name of the file (e.g. cedb_infrastructure.shp)

Full Path: If the file is contained in folders, please specify the full path name (e.g. folder\subfolder\cedb_infrastructure.shp)

Description (detailed): A full description of the dataset. What does it represent?

Copyright Holder: The organisation or individual who holds the copyright for this dataset. This may not be the same as the data origin.

Data Origin: Products and base layers used for preparation of the data (e.g. SPOT2 and SPOT4 imagery from Satellite Applications Centre)

Capture Source: Who (individual and organisation) has captured the dataset?

Scale Digitised at: The scale of the dataset (or resolution of raster/ image data).

Date Captured: The date at which the final product was prepared

Data Copyright: Does the data have a copyright? (Yes/No)

To be distributed: Can the shapefiles be distributed to the public? (Yes/No). If you want the data to be available on the mapping interface, but do not want the original shapefiles to be distributed, please say “No”. Alternatively, if you require some usage agreement to be signed by third party users, please give us a sample of the agreement, and we will prepare a licence agreement page [similar to this](#), to which users must agree before accessing the information.

Data and Metadata Information

Owner Organisation: Name of the organization that owns (normally also created) the dataset
Contact Person: Person responsible for the creation (or ownership) of the dataset.
Position of Contact: Position of the contact person in the organisation.
Contact Address: Postal address of the owner organisation.
Contact Number: Telephone number of the contact person.
Contact Email: Email address of the contact person.

Legend Properties

Legend Title: Title for the dataset to be displayed on the legend.
Feature Type: The feature to be represented in the legend (e.g. land cover classes or Critical Biodiversity Areas).
Scale Parameters: Minimum and maximum zoom parameters.

Projection Details

If the projection used for the dataset is a standard BGIS projection (WGS84 Geographic (lat/long) or UTM 34S), only the projection name must be provided. Otherwise, the following metadata fields must be filled in:

Projection Name: The name of the projection system.
Central Meridian: The north-south meridian or longitude of origin (central longitude) of the projection. It runs between the poles and perpendicular to the equator.
Upper Parallel: Vertical grid lines in the UTM system are oriented parallel to the central meridian. The upper parallel is the top vertical grid line for the particular zone.
Lower Parallel: Vertical grid lines in the UTM system are oriented parallel to the central meridian. The lower parallel is the bottom vertical grid line for the particular zone.

Datum Details

If the projection used for the dataset is the BGIS standard datum (WGS84), only the projection name must be provided. Otherwise, the following metadata fields must be filled in:

Datum Name: Name of the datum.
Semi Major Axis: Half the longer axis of the ellipsoid.
Semi Minor Axis: Half the shorter axis of the ellipsoid.
Inverse Flattening: The inverse of the flattening value of the ellipsoid.

Detailed Notes

Purpose: A detailed description of the purpose for which the dataset was created.
Methodology: A detailed description of how the dataset was created. (What was used as source data and how was it processed? For raster imagery, what was the RMSE? What rectification technique was used?)

Available documentation: Additional sources of information (such as project reports) which can fill in details excluded in this explanation. If possible, please include such documentation for publication via the BGIS website, or provide a link where it can be downloaded on the internet.

Attribute Fields

Field Name: A list of the names of each of the fields in the attribute table of the shapefile. Please capitalize all field names, because the mapping framework cannot read lower case field names.

Description: A description or explanation of each of the fields. This is particularly important where the field names are not self-explanatory and in raster layers.

Alias: If the field has an alias in the legend, please fill it in here.

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