



## Members Guide to Supplying GIS data



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## Introduction

This document provides a guide for Members of beforeUdig (BUD) for providing Geographic Information System (GIS data) or a nominated area of interest. beforeUdig's web based application OneCallAccess uses a GIS system to enable the selection of appropriate Utility members to notify of potentially impacting works on underground infrastructure. This ultimately means that it is important for beforeUdig members to provide as accurate and current information as possible.

This guide will help members of BUD to provide accurate information regularly to ensure that assets are protected. The following sections will assist members in identifying what type of information a member organisation can provide BUD and how best to provide it. The sections are as follows:

- Utility coverage types
- Supplying data to BUD
- Non Spatial Data
- Data verification
- Updating data at BUD

## Utility Coverage Types

Members with GIS Systems can supply a set of spatial data containing a nominated area of interest. The area of interest may be in the form of or a combination of the following:

- Asset corridors
- Extended Regions
- Points (or coordinate pairs)

Utilities providing updates are required to ensure that the data is supplied as **Latitude/Longitude WGS84**



### Asset Corridors

Asset corridors are generally provided where a BUD member has pipes or cables located underground and the member can build a buffer around the physical asset information contained in a GIS system. Corridor alignments are typically major linear assets (e.g. Petroleum pipeline, optic fibre etc.) where the centreline of the asset is buffered by a nominated radius (e.g. 100m buffer either side of the asset's centreline)



### Extended Regions

Extended regions are provided by organisations with complex and extensive networks within a defined or gazetted region. Regional zones for instance, may be gazetted council boundaries or operational jurisdictions



### Points

XY coordinates may be quoted to define either a region, a line or alternatively used to depict radial objects (e.g. traffic signals, survey bench marks, etc.). Again, the asset owner would nominate a radius for buffering purposes (e.g. 20m)

## Supplying Data to BUD

The GIS System used at BUD can support a number of GIS formats supplied by most Utilities. The following is a list of the supported GIS formats:

- MapInfo .TAB files – (extensions \*.DAT, \*.ID, \*.MAP, \*.TAB\* and optional \*.IND)
- ESRI Shapefile – (extensions \*.DBF, \*.SHP, \*.SHX and \*.PRJ)
- KML/KMZ (Google Maps and Google Earth)

In all cases any spatial data supplied to BUD must fit into these categories and be supplied in **WGS84** (Latitude/Longitude). In the event that a Utility is unable to provide data in the preferred projection/datum, then data can be forwarded in an alternative 'clearly specified' projection/datum and BUD will convert the data accordingly. The cost of converting data projections to **WGS84** will be borne by the asset owner.

## Non Spatial Data

Where Utilities can not provide GIS digital boundaries, BUD will attempt to work closely with the asset owner to create an asset profile for our service. Asset layers can be created by digitising from clearly marked-up hard copy plans or alternatively merging suburb boundaries to form a Utility's area of interest.

Where hard copy plans are supplied (e.g. topographic maps, street directory pages), these should contain sufficient detail such as roads, cadastral information and other features to easily allow identification of the proposed asset alignment or boundary extremities.

## Data Verification

To assist in the verification of any data conversion and/or data alignment issues between our respective systems, BUD provides an online system for registered members to view all provided Area of Interest data. This online system will also provide Members with the tools to view a history of information provided to BUD and understand the currency of information provided.

## Updating data at BUD

Utility Members can register and/or update an area of interest with BUD by forwarding their data information via email to [gis@pelicancorp.com](mailto:gis@pelicancorp.com) quoting your utility ID name and number. Whilst Utilities updates can be performed on a needs basis, BUD does however request, that Utilities supply a **complete replacement** of their data as an update and NOT just additions, deletions or amendments. By doing so, this ensures data integrity of asset coverage at any point in time. It is the responsibility for each member to create their own update process for asset bases that grow over time, i.e. a simple GIS query will tell them if they overlay their AOI with their own assets if their own assets fall outside the AOI. This query should be a standard scheduled tasks so that the member can be sure that their assets are always protected.