

The GeoDatabase - a data management environment for point-based geocoding and data aggregation in Statistics Portugal

The process to maintain and update the SDI is conducted by Statistics Portugal within the Geoinformation Unit. Statistics Portugal Geoinformation Unit has 25 technicians with GIS expertise that manage and edit the several features of the Geospatial Database (GDB). The Geoinformation Unit has 15 members at the central Lisbon Office and 10 technicians distributed by the 5 Statistics Portugal Regional Offices. These “regional” technicians are extremely important to enable a close and regular collaboration with the municipalities

One of the main focuses of Statistics Portugal’s Geoinformation Unit is set on editing and updating the Buildings Geographical Database (BGE), buildings points and addresses, including the buildings dwellings addresses.

The Buildings Geographical Database (BGE) is being continuously edited in a quality control process in order to increase the spatial accuracy of X,Y geographic position and its logical consistency with the addresses of the buildings. Following the construction of The National Dwelling Register, created from the 2011 Census microdata (buildings and dwellings), Statistics Portugal has developed an GIS web application for the interviewers that conduct the field surveys to report errors and updates in the location or the addresses of the buildings and dwellings of the Buildings Geographical Database. In this regard, these procedures ensure a continuous update process of the BGE in straight relation with the Statistics Portugal’s Department of Data Collection.

The update process not only includes residential buildings in the BGE but also other types of buildings with no residential capabilities, such as public facilities and commercial establishments.

The work is developed through the Indicators System of Urban Operations (SIUO) dynamically maintained by the Municipalities, using an electronic web-based platform, concerning the urban operations related with building permits and completed construction work, and based on the Business Register georeferencing process.

All the editing work is done with GIS software, desktop and WEB applications developed in house or acquired abroad. The reference data (orthoimagery) and the official administrative boundaries (updated annually) for this activity are being provided by Portuguese National Mapping Agency (Directorate-General of Territory) under the existing Memorandum of Understanding (MoU).

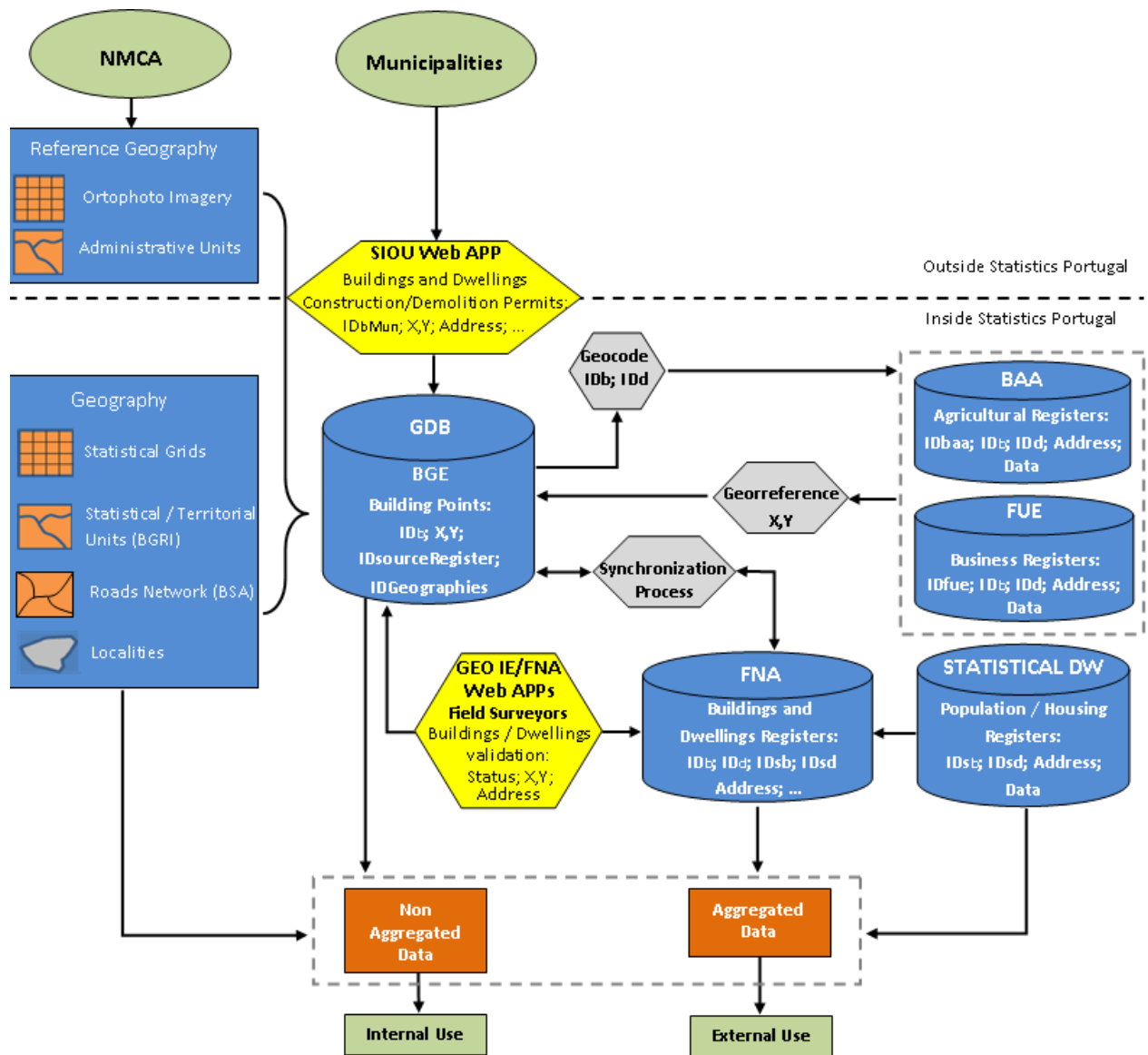


Figure 1. The GeoDatabase (GDB) and its relations to other data sources