



Expert commentary

BS 7666-0:2021 — *Spatial datasets for geographical referencing — Part 0: Specification — General model for gazetteers and spatial referencing*

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1 Overview

BS 7666-0:2021, the second edition of this standard, revises, cancels and replaces BS 7666-0:2006. It specifies requirements for the essential components of a computerized gazetteer of geographic locations in the United Kingdom.

A gazetteer is a definitive record of a particular class or classes of location. Such a location is identified by a 'geographic object', which can range in size from a lamp post to an administrative area, up to a country. Each record in the gazetteer represents an individual location, and contains sufficient information to find and identify it.

This part of BS 7666-0:2021 may be used for defining gazetteers of types of locations but does not specify any particular one, nor does it define a database schema. It provides the basis of the other parts of BS 7666 by defining a general structure to enable gazetteers of a range of classes of geographic locations to be created in a consistent way. Specific gazetteers of particular classes of location are defined in the other parts of BS 7666.

1.1 Reasons for change

This revision has taken into account the recent revisions to parts 1 and 2 of BS 7666, as well as the revised edition of BS EN ISO 19112:2019. The level of change incorporated into the revised version of the standard is low. The main changes compared to the previous edition are:

- some changes in terminology to match BS EN ISO 19112:2019
 - allowance of history of location state to be recorded
 - updating of UML models
 - harmonization of style and structure with the other parts of BS 7666
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2 Main commentary

2.1 Scope

The scope of the standard is to define the essential components of a gazetteer of geographic locations (objects), and the attributes to be recorded about each location instance. It has been modified to reflect that it is concerned primarily with gazetteers, and specifies little about spatial referencing in general. The title of the standard has been modified to reflect this change in emphasis, dropping the term 'spatial referencing'.

2.2 Terminology

A change in this edition has been that certain terms have been revised to improve understandability. The term 'spatial reference' has been changed to 'descriptive reference', with similar meaning. The term 'spatial unit' has been changed to 'descriptive identifier' to emphasize that it is the name that is being used rather than the real-world object itself. A separate Clause 6 has been introduced to explain this.

2.3 Gazetteer

A gazetteer of geographic objects is described by its metadata. This identifies the content of the gazetteer in terms of what is recorded, and additional information to aid its management and usage, including its scope, custodianship, currency and territory of use.

The standard allows for a classification scheme for the geographic objects, for example, types of local authorities. Rather than having a primary classification scheme and a secondary classification scheme for the geographic objects, as in the previous edition, this is generalized in the revised edition to (multiple) classification schemes, removing the previous limit of two.

2.4 Location

The records in the gazetteer are individual geographic locations. The standard defines the attributes to be recorded. Several modifications have been made to these. Multiple classifications are now allowed. Similarly, multiple identifiers (e.g. name, reference number, code) of the location are now allowed, rather than a (primary) identifier and multiple alternative identifiers as in the previous edition.

The attribute 'state' which identifies the status of the location, for example, its stage in the development cycle (e.g. 'planned', 'occupied' or 'demolished') is now a class in its own right ('state type'), with attributes 'state', 'start date' and 'end date'. This