

BS 7666-1:2019



BSI Standards Publication

Spatial datasets for geographical referencing

Part 1: Specification for a street gazetteer

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Summary of pages

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Foreword

Publishing information

This part of BS 7666 is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 December 2019. It was prepared by Technical Committee IST/36, *Geographic information*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

BS 7666-1:2019 supersedes BS 7666-1:2006, which is withdrawn.

Relationship with other publications

BS 7666 was originally published over the period 1993 to 1996 in four parts.

These four parts were revised separately over the period 2000 to 2002. During 2004 to 2005, all the parts were revised together, with a new Part 0: *General model for gazetteers and spatial referencing*. This provides a common structure for gazetteers of any class of geographic object.

Part 0 subsumed Part 3: *Specification for addresses*. Part 1 subsumed Part 4: *Specification for recording public rights of way*. The scope of Part 2 is largely unchanged. Part 5 is new in scope. Thus Parts 3 and 4 do not form part of the standard although there is a Part 5. Renumbering has not taken place to avoid any confusion with the withdrawn standards.

BS 7666 now comprises the following parts:

- Part 0: *General model for gazetteers and spatial referencing*;
- Part 1: *Specification for a street gazetteer*;
- Part 2: *Specification for a land and property gazetteer*; and
- Part 5: *Specification for a delivery network gazetteer*.

During 2016 to 2018 all the parts were revised; there were no major changes to the parts and as such they have kept the same numbers.

Information about this document

This is a full revision of this Part of BS 7666, and introduces the following principal changes:

- a) the scope of the street gazetteer has been clarified;
- b) elementary street units are mandatory for a level three street gazetteer;
- c) reflexive relationship added on "Street";
- d) spatial reference system added to gazetteer metadata;
- e) the "State" description is now physical and has been harmonized with the British Standard;
- f) relationship between street and elementary street unit changed to "is made up of";
- g) relationship between elementary street unit and street changed to "is part of";
- h) data type "Point" now has "X" and "Y" data type as "Real";
- i) Unified Modeling Language ("UML") diagrams updated; and
- j) state code "temporarily stopped up" removed.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is “shall”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Requirements in this standard are drafted in accordance with *Rules for the structure and drafting of UK standards*, subclause **G.1.1**, which states, “Requirements should be expressed using wording such as: ‘When tested as described in [Annex A](#), the product shall ...’”. This means that only those products that are capable of passing the specified test will be deemed to conform to this standard.

Where websites and webpages have been cited, they are provided for ease of reference and are correct at the time of publication. The location of a webpage or website, or its contents, cannot be guaranteed.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

0 Introduction

Streets are defined in different ways by different people for different purposes; references can be by name, number or description. In this part of BS 7666, a general, all-encompassing definition is taken.

Different ways of referencing streets are specified. Individual streets might have multiple references, and streets might overlap.

The intention of this part of BS 7666 is to enable the consistent definition of streets and their compilation into street gazetteers. This can be used for a range of purposes, including highways and streetworks management, and property addressing. A street gazetteer also provides the street referencing element of land and property gazetteers which provide a definitive list of land parcels and properties, each uniquely identified.

1 Scope

This part of BS 7666 specifies the data to be maintained in a gazetteer of streets, consistent with BS 7666-0, enabling different users of street information to use the same data with consistency of content, accuracy, currency and format. Different ways of referencing a street are defined to ensure that data can be accessed by street name, description, route number, unique reference number or external cross reference.

This part of BS 7666 also specifies the means of representing the geometry of the street in terms of coordinates. Three ways are allowed for this with successive levels of detail by:

- a) identifying the end points of a street, and representing the street as a single line segment;
- b) breaking the street at its intermediate junctions to create a set of constituent line segments, termed elementary street units; and
- c) describing the course of each elementary street unit.

Each of these options is defined by a level of conformity to this British Standard.

This part of BS 7666 is intended for use by those compiling street gazetteers for the purposes of highways and streetworks management and property addressing. It does not provide a database design or a transfer format.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the reference cited applies¹. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS ISO 639-2, *Codes for the representation of the names of languages — Part 2: Alpha-3 code*

¹ Documents that are referred to solely in an informative manner are listed in the Bibliography.