

# LAND COVER AND LAND USE CLASSIFICATION ASSESSMENT FOR A CREATION OF A NATIONAL MAPPING AGENCY FRAMEWORK

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## **ABSTRACT:**

Historically Ordnance Survey has collected information on land cover and land use but this has not been done in a methodical and comprehensive way. The land cover and land use information currently captured by Ordnance Survey does fit more into historic cartographic categories than a well-thought classification system. The challenge for a National Mapping Agency consists of designing a classification system that can respond to the needs of the variety of users. However, there is no one ideal or universal classification of land use and land cover. A review of different land cover and land use classifications within the UK shows that a classification is usually designed for a particular purpose, a particular geographical area or a particular user. An attempt to create a national categorisation of land use and land cover was the NLUD (National Land Use Database) classification. However, this has been scarcely adopted by government agencies and it lacks the degree of flexibility that a national classification should allow for. Our research has concentrated on two different levels: (i) the design of a flexible structure or ontology that would allow for the integration and relation of different classification systems and taxonomies and (ii) the design of a flexible classification system for use with data collected from different sources including remote sensing and GIS and fit for the purposes of a National Mapping framework. A test performed in the urban area of Bournemouth has showed promising results. This test has helped to identify what research needs to be done next in terms of methods and data.

**TOPIC:** Land cover classification

**ALTERNATIVE TOPIC:** Not Specified