

HTT033-08

Room:202

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## Ontology of Land use categories -a case study of "public facility"

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The interoperability of spatial data plays significant roles for developments of convenience spatial data infrastructure. Nowadays, the interoperable spatial data have been promoted by establishment of data standard or provisions. Land use categories, however, have been still important subject in data interoperability, because there are not enough quantitative aspects. In addition, semantic interoperability is one of the biggest challenges in land use studies. In this study, the ontological analysis was conducted for "Public facility" in Japanese by experimental tests toward development of standardized land use classification. The reasons to employee "Public facility" are that its concept is diverse and complex compared to other same level category (i.e. Residence, Commercial facility). The people being tested are 50 students in University of Tsukuba. The contents of conducted experimental tests are following:

1. To categorize facilities to "Public facility", "Commercial facility", "Residence" or "others".

2. To write down facilities that can be categorized to "Public facility".

Test 1 can be expected to clarify the peripheral types of the facilities categorized to "Public facility" (i.e. not Prototype), and Test 2 may reveal its Prototypes.

Keywords: land use category, ontology, concept definition