Smart Surveyor for Property Assessment

The use of Geographic information systems in real estate assessment In The Netherlands.

Luc Hermans, Ruud Kathmann and Marco Kuijper RO (Netherlands)

Key words: Geoinformation/GI; Property taxes; Valuation

SUMMARY

The annual assessment of real estate is a municipal responsibility in the Netherlands. To put this in perspective, 355 municipalities are responsible for the assessment of over 9 million residential and non-residential real estate properties. The assessment industry in the Netherlands is to this day heavily reliant on spreadsheet thinking which is at least remarkable due to the spatial nature of real estate and thus to the fact that the mass appraisal process primarily uses geographical data.

Current legislative and juridical developments are driving the municipalities to move away from the spreadsheet thinking towards a more geospatial way of thinking. One of these developments is the juridical decision to exempt the core zone (or formal maintenance zone) of dyke bodies from real estate taxation. These dyke bodies are often part of privately owned, often residential properties.

To identify the affected real estate properties for this exemption, in a short period, the use of geographical information systems became a more mainstream practice in the Dutch assessment industry. Because of this development, tax departments of municipalities were (more or less) forced to work together with the GIS-departments, or to hire GIS-knowledge from private companies.

The Netherlands Council for Real Estate Assessment sees this development as a good gateway towards a broader use of geospatial information and geographic information systems in the assessment industry. The use of GIS in real estate assessment has a wide range of possibilities such as data gathering (for instance distance to important facilities or orientation toward the south), data quality control (unexpected differences in building year for adjacent houses) and more ambitious implementations such as the incorporation of spatial statistics in automated valuation models.

This paper will discuss how geospatial data and information systems are used in the Dutch

Smart Surveyor for Property Assessment

The use of Geographic information systems in real estate assessment In The Netherlands. (11053)

Luc Hermans, Ruud Kathmann and Marco Kuijper RO (Netherlands)

FIG e-Working Week 2021 Smart Surveyors for Land and Water Management - Challenges in a New Reality Virtually in the Netherlands, 21–25 June 2021

assessment industry at this point in time and it will address possible avenues of further development and applications within the assessment industry. Furthermore, it will discuss how legislative and juridical decisions can be a driver for increased use of geospatial ways of thinking. Furthermore this paper will
address ways of implementation of locational aspects in Automated Valuation Models.
Smart Surveyor for Property Assessment
The use of Geographic information systems in real estate assessment In The Netherlands.

(11053)

Luc Hermans, Ruud Kathmann and Marco Kuijper RO (Netherlands)

FIG e-Working Week 2021 Smart Surveyors for Land and Water Management - Challenges in a New Reality Virtually in the Netherlands, 21–25 June 2021