Spatial Data Quality Model for "Fit- For- Purpose" Methodology in Colombia

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SUMMARY

In Colombia the modernization of the Land Administration starts with the Peace Agreement in 2016. At the same time new policies given by the national government around cadaster, land tenure and land titling has been produce in order to have updated information in these topics. In this way the Spatial Data Infrastructure for Land administration is creating to standardized and to support the administration of the land information of the country. Therefore, one of the challenge is to have standardized data with the quality required according the technical specifications.

The Universidad Distrital of Bogotá (Colombia) trough the research group NIDE has been working together with Kadaster and ITC (University of Twente of Netherlands), to test the Fit - for - Purpose (FFP) methodology in 2 municipalities in Colombia focused on land titling. In this way and aiming that different users can access and use the spatial data of the boundaries of the rural parcels acquired in field using FFP, It is important to determine the quality of this data. Due the fact the FFP methodology still does not have technical specifications that fit in the Colombian cadastral requirements and standards and support data quality measurement, it is essential to build a FFP spatial data quality model in order to ensure the reliability of the information.

The aim of this paper is to present the FFP spatial data quality model, that includes the Technical Specification profile, to measure the positional accuracy criterion of the parcel boundaries data, acquired with "Fit for Purpose" methodology, focused on land titling in Colombia and based in the standard ISO 19157:2013.

The products of the project are the FFP quality data model that includes a profile of technical specifications for FFP in Colombia, and the results of the measurement the positional accuracy of the spatial boundary data collected in the

field.

As a conclusion, the design of the FFP data quality model is essential for the implementation of the FFP methodology in Colombia, because is the frame to control the quality of the data and to standardized it, in order to be a level in the Land Administration Spatial data infrastructure, to ensure the access and usability of this information by the national organizations related to the land in Colombia.