Spatial Data Management in the Framework of the Fit-For-Purpose Approach Implementation in Colombia

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SUMMARY

The implementation of the FFP approach in Colombia is carried out for Kadaster international of Netherlands in collaboration with ITC (University of Twente) and the Faculty of Engineering (Universidad Distrital of Bogotá). This work involves basically three main activities: Field work for data acquisition, administration of the spatial data and the dissemination of the results. The administration of the spatial data is essential, taking into account the spatial Database needs to be reliable, very well organized and standardized in order to assure the quality of the data.

The data obtained in the field must have post-processing where the topology between polygons is built. For data editing algorithms and scripts were created in order to perform the entire topology correction process automatically and for the generation of maps and other products.

The aim of this paper is to present the characteristics of spatial Database and the developments perform to administrate the data for the rural parcels of the municipalities of Vista Hermosa and Apartadó in Colombia in order to guarantee data completeness and topologically consistency, due this information is the input for the activities such as public inspection, where the owners validate the data acquisition in the fieldwork by themselves and reaches agreements with their neighbors to approve the boundaries of their parcels. Also we describe the currently information flow in the database, since the loading process, passing for the data validation, semiautomatic adjustment process between property’s boundaries, boundaries generation, public inspection preparation, public inspection and finals validations.

Finally, we adjust the model to the LADMCOL, in order to interoperable with the different government agencies that will use this information for decision making.