New Cadastral Processes for Town Planning Aim at Expediting Land Registration

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SUMMARY

The State of Israel has suffered in the last decade from a housing crisis where house prices are very high. Thus, there is a necessity to expedite the preparation and approval of town plans for purposes of developing residential neighborhoods. This has created a need in Israel for new cadaster processes that enable accurate design and for shortening the time required for registration of rights in the land.

The Survey of Israel (SOI) manages the Cadaster database of Israel (the NCDB -National Cadaster data base). This database contains information of all registration and subdivision (mutation) plans (see figure B) and other cadastral maps which are approved for registration. This database contains Cadastral Maps from different periods (1930-2017). As a result, this database is heterogeneous, containing data measured using different methods, belonging to different periods and range in accuracy from 5 centimeters to 5 meters.

In the past, digitized data of blocks and parcels from the NCDB where used for town planning. According to the survey regulation subdivision (mutation) plans are approved following the approval of the town plan. Thus, if the Town Plan design is not accurate enough, adjustment problems has accrued while preparing the subdivision plans.

To solve this problem a new process was developed (BDM): Boundary Documentation Map. The BDM is prepared by reconstruction of parcels boundaries. This process requires field surveys, calculations and transformations. The PDB is submitted to the SOI for verification and approval as an official paper that document boundaries. The BDM is then used as the basis for accurate design and the preparation of design maps. This situation allows the design to be based on optimal cadastral. It also saves the need to change boundaries in the detailed design phase. Moreover, It
accelerates the registration process (approximately a year) as describes in the article.

Next, a subdivision plan that follows the BDM and is based on coordinates has Quick Queue, because creating the subdivision based on accurate basis parcels is much faster. The quality control includes topological, structural and logical testing only and done automatically.

The article describes the new process and the benefits of using an accurate cadastral database during preparing town plans.