IMMOVABLE PROPERTY REGISTRATION SYSTEM IN ALBANIA,
UNIFICATION OF CADAstral MAPS WITH PROPERTY REGISTRATION
Spiro Lamani
Chief, Surveying and Mapping Department
Project Management Unit for
Immovable Property Registration System Action Plan
IPRS
Rr. Durvesit - Laprake
Tirana, Albania

ABSTRACT

Economic reforms in Albania have necessitated a new property registration framework. USAID and EC/PHARE are sponsoring the institution of such a structure through the Immovable Property Registration System (IPRS). The new system combines information from a wide variety of land cadastres and transforms property registration from an owner based to a parcel based system keyed to a base map.

The land information and all mapping is intended for use on computerized systems. Existing maps will be updated and new ones will be created based on aerial photographs and field assessments using new and traditional technology. The IPRS legally secures property ownership and opens the door to free market property exchanges.

INTRODUCTION

Over the course of the last several years, economic reforms in Albania have been oriented towards a free market system and have demonstrated the need for property registration framework. The establishment of the Immovable Property Registration System (IPRS) has begun the creation of the system. The United States Agency for International Development and the PHARE Programme of the European Community are technically and financially assisting this project.

The new registration system unifies land information including forest, pasture and urban cadastres as well as urban deeds registration. This one comprehensive system is based on land parcels instead of the former system which was based on land ownership.

TRANSITION TO USING REGISTRY INDEX MAPS

The first step in establishing the new property registration program, is the conversion of registration from the owner base to the parcel base. The second step is to represent these properties graphically on registry index maps with unique parcel numbers based on the state coordinate network. The procedure for creating the registry index maps is as follows:

-Update existing urban and rural cadastral maps.
- Prepare new maps using traditional and current technology.
- Digitize maps to link parcels with the state coordinate network.

The existing rural cadastral maps were created using traditional methods on either a scale of 1:2,500 or 1:5,000. These maps are based on either the Bessel Ellipsoid or the Gauss-Kruger Coordinate System. Approximately one third of the total area of Albania (10,700 km²), has been mapped. Roughly 90% of the agricultural land is included in this mapping which has taken place over the last 45 year period.

The registry index maps for the IPRS project required that those maps at the 1:5,000 scale be enlarged to 1:2,500 using a photo enlargement process. This larger scale better reflects small parcels many of which were created as a result of fragmentation which took place during the transition land privatization.

COORDINATE SYSTEM

The Krasowsky Coordinate System will be used for the unified cadastral maps. Those maps currently based on the Bessel Ellipsoid will be translated into the Krasowsky System. The translation coefficient will be calculated using the coordinate points of the state network so that the final product will be rectified with the state’s coordinate system.

The comprehensive registry index map will serve as a base map which will be amended as needed to reflect the completed network of coordinates and new parcels. Field measurements will provide the basis for representing these new parcels on the 1:2,500 scale maps. It is anticipated that approximately 7,000 maps will need to be updated at the new scale. Urban village maps will be integrated into the parcel maps. Creation or compilation of maps at greater than 1:2,500 will be done depending upon population and housing density in order to clarify parcel boundaries and locations.

MAPPING URBAN AREAS

It is difficult to graphically represent urban properties because an urban cadastral has not existed. Ten years ago maps were produced at the 1:5,000 scale for 42 cities. These are based on the Krasowsky system and approximately 144 square kilometers were mapped on about 2,000, 90 X 60 cm sheets.

The current registration system requires defining property features beyond general topographic attributes. In 1994, aerial photographs are being taken in both rural (at 1:10,000) and urban (at 1:5,000) zones covering about 4,000 km² in the western part of the country. These photos are already being used to prepare the rural zone maps at 1:2,500 and city zone maps at 1:1,000. This process is done following a plan which requires these maps for the
registration system in defined cadastral zones. In 1995 aerial photographs will be taken of the remaining 3,000 km$^2$ in three areas where the existing cadastral maps are very old or unsuitable. The combination of the existing cadastral maps and the aerial photos (especially for village urban zones) creates the potential for property registration in numerous cadastral zones.

The aerial photography does not reflect all of the property attributes, but only those apparent at the photographic scale. Other characteristics will be added through field assessment. 10% of the agricultural land in Albania is in the mountains, but currently, suitable maps do not exist. These areas will be surveyed in the field using classic theodelite methods and for some regions the total station technique (new in Albania) will be used. We may also use global positioning systems (GPS) to establish coordinates of new geodetic control points in the mountainous regions where the control points are currently scarce. We are collaborating with a GPS specialist from the University of Florida for this portion of the project.

**MAPPING NON-URBAN AREAS**

The above information, and all mapping is ultimately envisioned to be digitized and used electronically. Computerized systems will facilitate the definition of data collection methods in compliance with the methods which were used or will be used for surveying and mapping. Staff will need to be trained as such electronic systems are new in Albania.

Land registration in more rural areas including forest land, pastures, and other non-productive lands will use existing 1:25,000 or 1:10,000 scale maps as well as the forest cadastral maps. Property is being registered in each separate zone based on the privatization documentation and its graphic representation on the registry index maps. Each property is registered on a separate registration document. They are maintained in books containing a maximum of 250 documents.

**CONCLUSION**

Albania is divided into 2,952 rural cadastral zones. Cities are divided into other zones in which 2.5 million properties comprise one zone. For property registration, we are using documentation from all authorized agencies including the Land Restitution Commission, the State Agency of Housing Privatization, and other privatization agencies. The new property registration system legally secures properties and owners and opens the door to free market property.