Kosovo Cadastral Agency

Institution Building in Kosovo – Failure or Success?

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Kosovo in short

- Province in former Yugoslavia, formally still a part of Serbia
- Ethnic conflict erupted in 1999 – still a very tense situation between Kosovo Albanians and Kosovo Serbs
- UN established UNMIK in 1999, an interim administration organisation for Kosovo
- Local government has now been established, but UNMIK are still in charge for some important reserved functions
- To have a security presence in Kosovo and to prevent new ethnic conflicts KFOR was established and had originally 50,000 troops from 38 countries deployed in and outside Kosovo. There are now 25,000 troops.

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KOSOVO CADASTRE SUPPORT PROGRAMME

- After some prior assessments it was decided to establish a three-year project to re-establish the cadastral system of Kosovo
- The project was supported by Norway, Sweden, Switzerland, UNMIK and UN/Habitat and was implemented late in the year 2000
- Even though the main objective was to establish a system that provided security for property transactions, the project had to cover many aspects in order to build up competence and capacity within surveying and related fields in Kosovo
- Kosovo Cadastral Agency (KCA) was established in November 2000 in order to implement the objectives of the Support Programme

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KOSOVO CADASTRAL AGENCY

- Established a strategy and plan to re-establish, maintain and administer a cadastral system
- Developed part of a legal framework, adapted existing standards and harmonized procedures
- Provided the municipalities with modern surveying and computer equipment
- Trained the employees in the municipalities to handle new technology and to plan and manage their own activities and resources
- KCA was to be developed to a central competence with much the same tasks as a central surveying and mapping authority
LESSONS LEARNED - SUCCESSES

- The delivery and introduction of computers and total stations with peripherals
- Digital orthophotos covering almost the whole area of Kosovo
- New Reference Network and Datum (EUREF 89) are highly valued by many organisations and projects, but it is in minimal use in the municipalities
- The establishment of an updated and computerised property register (KCID)
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New Reference Network

32 triangulation points have been measured, computed and integrated in the EUREF System (European Terrestrial Reference Frame).

Statistics of the 1st Order Reference Network measurement and calculations

- Sectors: 8
- Stations: 32
- Static measurements: 34 hrs., each point
- Observations: > 3'000'000
- Accuracy rms North-South: 2.5mm
- Accuracy rms East-West: 4.4mm
- Accuracy rms Height: 8.7mm

Projection

The Gauss-Krüger conformal transverse cylindrical projection (7th zone) are adopted. But in contrast to the old Gauss-Krüger (GK) projection using the Bessel ellipsoid the new system are based on the IUGG ellipsoid GRS80.

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LESSONS LEARNED - LIMITED SUCCESSES

- Nearly 3 years training in the use of total stations and surveying and GIS-software has had minimal effect
- Calibration base is not in use
- There was little impact of the investments in the legal part of the programme
- The heavy investments in an improved Immovable Property Rights Register (IPRR) might pay off, but has so far not been implemented
- Financial planning has been neglected and the sustainability of the current organisation of KCA is unsure without the inclusion of the Municipal Cadastral Offices

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Attained results (1)

- Kosovo is covered by aerial photographs (10,800 km²) and nearly 90% is covered by digital orthophotos
- A new 1st order network has been established and the 2nd and 3rd order network is being finalised
- Municipal and a central cadastral database has been established with over 2 mill. parcels
- Trained more than 350 locals in use of GIS, GPS, surveying and in use of databases and IT technology
- Scanned and vectorized more than 10,000 maps
- Established a central organisation with 70 employees
- 55 total stations, 31 levels, 9 GPS, 125 computers etc. have been purchased and distributed

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Attained results (2)

- First new legislation on property passed by the Kosovo Assembly in order to establish Immovable Property Rights Register (unified or multipurpose cadastre)
- Locals now in charge of all units in Kosovo Cadastral Agency
- Kosovo Land Information System initiated
The present capacity and institution building programme ended in October 2003, but a follow up programme is absolutely necessary to secure investments and ensure continuity and maintenance of the systems introduced.

**MAIN RECOMMENDATIONS**

- Define the future organisation of Kosovo Cadastral Agency after Municipal Cadastral Offices have been included
- Commence immediately a process in KCA of business planning and training based on modern market-oriented management principles and tools
- Develop KCA and its future local offices into self-sustained units in technical, staffing and financial terms
- Establish the Immoveable Property Rights Register (IPRR) in the Municipalities and the detailed working procedures and technical infrastructure necessary to support this activity
- The data loading of the IPRR and the conversion of existing possession rights to some form of ownership, e.g. leasehold
- Development of private sector capacity within cadastral and geodetic activities, including cadastral maintenance, digital mapping and data conversion. This includes the introduction of licensed cadastral surveyors
- Resolution of the problem of socially owned land in municipalities and land held by socially owned enterprises
- Development of spatial data infrastructure and the provision of large/medium scale digital maps
- Establishment of physical plans at the municipality level