

The Albanian Association of Geodesy

with the kind cooperation of

The Italian Consiglio Nazionale Geometri

has organized the Seminar



Geo-referencing of Cadastral maps

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Saturday 27 April 2013

from 9.30 to 13.00

Mondial Hotel

St. Muhamet Gjollësja

TIRANA



9.00 REGISTRATION ATTENDEES

9.30 START OF SEMINAR

- Why do raster maps need to be geo-referenced? Importing a raster map into a CAD software:
 - o No real map coordinates, origin (0,0) in the lower-left vertex of the raster image.
 - o Measurement units as pixels, not meters.
 - o Disorientation to the correct North direction.
- The 4-parameters roto-translation :
 - o Theoretical outline of the 4-parameters transformation.
 - o Practical example of a 4-parameters geo-referencing.
 - o Verifying the precision of a scanned map.
 - o The lack of removing the deformation.
- The Grid transformation to retrieve map points located on limited sections of the map:
 - o The algorithm to rectify the map grid squares.
 - o Practical example of the Grid transformation.
 - o How to retrieve points beyond the map edges.

11.00 BREAK

11.15 RESTART OF SEMINAR

- How to use the points retrieved from the map for a boundary reconstruction:
 - o Theoretical notes on pure-barycentric and rigorous-least-squares roto-translations.
 - o How to apply the map-survey scale factor, i.e. adapting the map to reality.
 - o How to calculate the observations needed to track the boundary back in the field.
- The Trilateral transformation for maps without (or unreliable) coordinate references:
 - o The Trilateral algorithm to rectify the map.
 - o Practical example of a Trilateral transformation.
- The Homography and the Rubber-Sheeting transformations:
 - o The basic concepts.
 - o Why Homography and Rubber-Sheeting are not suitable for Cadastral maps?

12.30 QUESTIONS AND ANSWERS

13.00 END OF SEMINAR

To register: shgish@gmail.com – 0692724275 - 0696997697

After the seminar a certificate of participation will be awarded to all attendees.