

Summary of the seminar on
Geographical Information Infrastructure
Tirana, Albania 10-11 Mars 1998

I. Discussions from the representatives of public and private entities, taking part in the seminar

Myslym Pashaj, Institute of Military Topography

Institute is passing a very difficult situation. Institute is very open to cooperation with public entities as well as with private businesses. This is a recent change that the institute has decided to follow. However, there are no official concept changes in the work of the institute in terms of changing the statute and also trying to cover other maps related to the public needs. There is no yet any change in the orientation of the institute from a military one to a civil one.

Institute still uses the classical methods for the administration and/or generation of GI. Information is all in paper format.

Institute is trying to foresee as much as they can that the information to be structures for future use in GIS.

Institute will keep the geodetic network of Albania, it uses the air photography with reserves, covering small and medium scale maps.

There is a liberation of the issue of "secret".

Problems:

Institute is suffering because of the information flow out and no information comes in the institute.

Professionals have left the institute and no other skilled people are coming in. Urban areas are a big problem, related to the work of urban institute.

Author's right is not respected.

Reliability of the information generated from other institutes is poor.

Projects:

Follow NATO and EU standards.

Work with the maps of 1:50,000 to make the renovation of those maps. Mostly the coast area of Albania.

Training in neighboring countries (Firence, IT)

Trying to build a digitizing sector.

Ideas:

Agreed to have a Board of GII.

Hydrometeorology

Institute working since 1972 (?).

Covers meteorology and hydro. Emergency cases. Survey, agroclimatic. Weather forecast. She described the organizational structure of the institute. It will be worth asking a written

presentation (mentioned phenology, agriculture sector; air quality dept, air pollution; surface waters, water distribution, solid waste, hydrology marine, water quality and pollution)
There are 105 station meteorological. 30 of them are since 1901.
Institute has conducted studies concerning the potential for tourism.

Data:

Institute has started digitizing but it wasn't clear the extent of it and the amount of data already digitized.
Even that there are some new technology in the institute still there is a need for it.
Foreign projects are seen as the means of modernizing the institute.
Until 1995 the data were given free. Now institute has started the self-financing policies.

Problems:

Institute needs a telemetric system. Currently it is hard even to communicate for weather broadcast.
Professionals disappear from the institute.
No coordination with other institutes. The data of this institute could be used by a large number of other public and private entities.
It is an unprotected institution in terms of the data. Author's right is seen as a big problem.

Maxhun Dida, Forest and Pastures Institute

Institute has a lot of good data about the forest and pastures in Albania.
There are a lot of maps in the institute, management maps, good inventories of the forest and pastures.
There is a lot of damage caused to the forest and pasture but the institute has an estimation of those damages.
Institute uses the classical methods and old technology, based on military maps produced by military topographic institute. It will be hard to integrate them in digital formats.
Recently modern technology has come in but still there is a big need for more.
They have started using software packages that are open to GIS.
Institute is trying to identify the list of users if its information.
Institute uses and needs more data from the geographical institute.

Ideas:

There is a need for a coordination group for GI. It can be under one of the ministries (Agriculture or Environment (? Check for this Ministry))
Good experience from Slovenia.
Potential work: land use projects, forest boundaries.
We need GIS country level standards.

Institute of Geology

50 years old institute, actually start working since 1920.

Under the Ministry of Economy and Privatization.

There are 12 filial (branches) all over Albania.

Geologic and Geophysics Coverage.

There are 110 employees, qualified, some of them post university qualification, in Albania and abroad.

Maps at scales 25'000, 50'000, 100'000, and 200'000.

In recent years they are trying to computerize their data.

There is a cooperation with a Hungarian Institute, plan is to prepare the geo-environmental maps for the area from Shkoder to Vlore, right now only from Shkoder to Lezhe.

Also they prepare maps of hydro-geological characteristics.

Maps of chromium, copper.

Work together with foreign institutes such as Athens, Scopie, Italy, Hungary.

Looking forward to approving the Law on Geologic Service, expected March 1998.

Institute of Geophysics and Geochemistry. Salvador Bushati

Activities: geology, geophysics, geochemistry, TOPOGRAPHY.

Cooperation with military topographic institutes and geography institute.

Base data are maps from 1:200'000 to 1:25'000, these are since many years ago.

Also, working on 1:10'000 to 1:500, special dept, 22 people, 7 highly qualified.

Work – maintain magnetic network, gravity network, based on gravimetric maps of 1:200'000.

Archive is almost 50 years old.

All the surveying work has been conducted in a disciplined way and accurately, MTI and the geodesy dept.

In cooperation with the Association of Geodets, work with Germans to calculate 5 points by GPS.

Linkages with about 17 other institutions from different countries.

It is a member of the Magnetic Atlas of the World.

Receives an international review every month.

Institute is for restructuring of the work but not reduction of the work.

Proposal for the geodesy dept University to restructure the branch of gravimetry.

There is always a need for funding.

Eduard Isufi, University, Geodesy dept

Teaching mapping, geodesy, photogrametry. Recently also GPS, GIS, Remote Sensing, introduction of Geoinformatica.

Urgent need for restructuring and for cooperation with European Institutes. It

would be great if a Tempus Project. Equipment and training.

Gjergji Qeleshi, Geology and Geodesy Institute

Duties urban mapping. Bonification projects also.

In 1993 based on self-financing. Problem is the flow out of the information.

Problems caused by changing and replacing the directors of the institute.

Activity is currently reduced. Mainly surveying the populated areas, and mostly in Tirana.

Institute has some software packages that perform the studies of geodetic network in 1/2/3-dimensions.

Currently the ministry of Construction has no vision as to what this institutes will do in the future.

From 70 people in the institute now there are only 23 people.

Ahmet Jazoj, Project Management Unit for IPRS

History of the cadaster since 1947. Change from a declarative cadaster to a technical one.

Covers about 1'000'000 Ha, ~10'000 Km², in Krassovski and Bessel, in 1960 unique system.

Archive became out of date because of the Land Privatization, fragmentation in smaller pieces of land.

PMU was created, integration into a registration system.

Using the existing maps, using classical methods and new technologies as well. Mentioned MOLA (Meeting of Officials of Land Administration) as an organization to cooperate, to get and give information.

Total stations, GPS, training, cooperation with university.

Main duty of the PMU being the legal ownership registration, may be the geodetic accuracy is low.

It is the only institution doing a large area updating and surveying of the maps.

Air photography of 4,000 Km² and it is expected another 3,000 Km² to happen.

Ideas:

There is a need for coordination. Creation of a board of GI is needed.

Need for a Law on GI, standards, and sharing information.

Pal Nikolla, Geography Dept

There have been studies already, mostly based on classical methods.

In the department they have received computers, not installed yet because of space problems, but soon they will.

Two directions of the department (a) improvement of the curriculum and the

quality of the students; (b) research purposes.

Legislation related to GI should be drafted. Author's right seems to be a problem.

Altin Arapi, Lorenzo Co.

Basically dealing with digital information administration.

PMU demands high quality work while the other institutions do not.

We have a license and have the right to process every kind of GI.

They have produced some times their own geodetic network in performing different tasks contracted.

We are facing problems with different software packages.

Plans: expand the activity and becoming a full-service-providing company: architects, construction engineers, hydro, etc.

Namik Koplaku, GeoComp Company Ltd.

We are a GI processing company mainly. Also we provide services in the field of surveying. Activities include training for the use of geographical software packages.

We have a programming team that has made a good use of modest technology for solving different problems.

Fotaq Nano, INIMA

History of the Institute, since 1971.

New situation now, free-market, reduced activity, professionals keep leaving the institute, from 1990-97 about 80 people have left the institute.

They are ready to offer help in issues of author's right, coordination, cooperation.

They have access to Internet already.

Main project now is the organizing of National Census (in Albanian is called the General Registration of Population), it will be dynamic. Centralized national system, in order to keep up with population movement and emigration.

Urban Maps will be needed. Especially the identification of the election voting areas, to follow the European standards.

Institute is ready to cooperate based on reciprocal interests.

Ergjin Samimi, Geography Institute

In the discussion we should say "GI and Remote Sensing".

There are many GIS units in Albania. Some institutions have been progressing and some are left behind, we should find ways of bringing all the institutions in the same development level.

A board is needed. It could be a mixture of the alternatives 3,4,5,6 of the proposals (see below the Alternatives).

It is important to develop the initiative of the individuals because this would be the main factor on the success of such a board.

We should not be based on the alphanumeric data, this is something of the past, we should move into air photography, remote sensing satellite images. We should generate new information as well.

Very important for the GI community is the awareness of the public on the importance of GI.

Remark: cadaster should include the 3rd dimension as well (altitude).

Sharing information is a very good idea, but policies should be worked out for the definition of prices for different data and products.

ESRI proposal for

(a)the design of the GIS strategy for Albania (organize seminars, interviews, define the fields of application, collect results, and prepare recommendations (related to high structures data, high concepts, main layers of information, and propose an organizative and administrative structure for GI), final presentation, cost of doing this \$175,000 for 6 months)

(b)pilot phase

(c)implementation phase.

Potential Duties of the Board for Geographical Information Infrastructure (BGII)

- 1.Coordination between Albanian institutions, public or private, who administer, manage, generate, or process GI.
- 2.Coordinate the work for defining the GI standards. Need for more precise definitions of technical standards that exist in different professions and the standards related to the digital data format. The latter one being important for data sharing. Integrate with the European and global initiatives for GI standards.
- 3.Coordinate the work for the design of policies related to the legal issues of GI: (a) access to information; (b) author's right; (c) privacy; (d) liability (who is responsible for the damages caused to users by providing wrong information to them).
- 4.Coordinate the work related to different foreign funded projects that will initiate in different Albanian institutions. This way the board with the participation of technical experts from different institutions will provide consultancy to foreign projects as how to make the investments efficient.
- 5.The board could be used also as an information clearing house, i.e. a data center that will receive information from different institutions, and also let these institutions to search for information. By 'information' we mean not just only map information, or GI, but also information on the activities that different institutions are conducting, different policies they are following, new developments. In other words, this information clearing house should be seen as a center to support the interests of different institutes. Also try to push the idea of the creation of an open Internet service in Albania through which this clearinghouse could function.
- 6.Collect the expertise from the different institutions in Albania and prepare a list of recommendations related to software and hardware to be brought in the country.
- 7.Maintain the contacts with the international similar organizations (mainly Europe (EUROGI, MOLA, CERCO), but in the frame of the United Nations' initiative as well). Discuss different experiences that have or are happening in other countries, especially in other Eastern European countries.
- 8.Collect suggestions from different institutions as how many students and on which directions should be prepared each year (in cooperation with the university).
- 9.Conduct public awareness campaign (sensibilization) as for the importance of GI in the society.
- 10.Coordinate the efforts of institutions for their strengthening.
- 11.Etc. (to be added)

Alternatives for the creation of the Board for Geographical Information Infrastructure

12. Combine different agencies in a self-financing stock corporation.

Each member in the corporation puts its assets and according their value the share of this member is defined. Also, the profit at the end of each exercising period is divided according to these shares.

While this is a scheme that might be used and be successful in other countries, there is a general feeling that it will be very hard to implement in a country like Albania, which is just coming out of a central oriented economy. It could be considered for the future.

Also (according to Jurg Kauffman) such an idea is appropriate when the share holders have big data bases to offer in the stock corporation. Albanian institutions do not have such big data bases.

13. Create a coordination unit with representatives from different agencies.

There won't be any employee. All institutions will send their specialists in a (let say) monthly meeting to discuss the issues of GI. While this idea might sound good, because it does not require a structures organization with a certain budget, the experience has proved that most of the time such initiatives have not lasted for long. Also, the need for a leading institution might cause jalousie problems.

14. Use one of the existing powerful (important) institutes a powerful organization which apart from producing GI will carry out the duties of coordination between institutions in Albania.

Again, this idea is hard to implement given that different institutions might like to have that role, and this will cause long debated to define which one to chose.

15. Create a powerful (important) institute which will administer and generate and produce GI for its own interest, and also will carry out the duties of coordination between institutions in Albania.

This idea is difficult, given the difficult conditions that government institutions are already passing. And creating another institute, it will not be a bright idea.

16. Create a very small unit with 3-4 people, which will be an administrative unit for the coordination of all GI related work in Albania.

This unit will not have any authority for decision making. Their main duties are listed in the previous pages.

This is a good option because it does not require the creation of a very large unit that will be hard to budget for. This solution also avoids the chances for jalousie between different institutions.

17. Have an ad-hoc unit with the representatives of all the institutions interested,

that will be gathered and discuss the issues when they revolve.
This option is easy to implement, but it does not have chances for long-term survival, and requires a lot of motivations from individuals and from the institutions.

18. Create an Association of the GI specialists, similar to other professional associations in Albania, but with broader purposes and with a larger number of professions.