

The Development of a National Spatial Data Infrastructure (N.S.D.I.) in General and especially in Costa Rica

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SUMMARY

The development of a national spatial data infrastructure (N.S.D.I.) in general and especially in Costa Rica taking in consideration the actual developments in Costa Rica concerning the first steps to a national data infrastructure and experiences in this field elsewhere in the world. A National Spatial Data Infrastructure is a relatively new idea in the world of geographic and spatial data. It can be defined as all the policies, technologies and resources to be used to come to a situation that all the spatial data in the society can be used and shared by everybody that means in all governmental services, other public entities providing public services and in the private sector.

This new idea is still in development and will stay many years more in development. The new technological tools (automation) as it has been developed and is still developing make it possible that the spatial information will be directly accessible for all users, so they can use it for their own specific tasks but they can also exchange information with all other users. The fact that the common base will be used as a base for all users makes it also less expensive for each individual user to participate in the use of the common information.

The idea to share and use spatial information is not new, also in the analogue time in many countries a start has been made with this activity. However in the actual situation with all the possibilities that the information technology has created and is still creating the possibilities and the wishes to come to a National Spatial Data Infrastructure is growing. In many countries due to the actual circumstances the new developments has started already with all the good experiences and successes but also with all the problems, mistakes and children's diseases that can be expected. In the actual situation it is interesting to discuss these developments because also Costa Rica is coming in the phase that a national data infrastructure will be developed. And not only Costa Rica is in that phase, also in other countries in Central America these new developments will start.

The presentation describes the different aspects of the first steps to come to a National Spatial Data Infrastructure, based on European examples and the situation in Costa Rica. Aspects that will be discussed are between others:

a. the participants

1. The role and requirements of the existing mostly central governmental services as providers of information for the actual and future situation. In general this concerns the organisations for the topographic mapping; large and small scales and the organisations for the registration of the real rights.
2. The role and requirements of other governmental, semi governmental services and entities providing public services to the society in the actual and future situation. This concerns the municipalities and providers of electricity, telecommunication, water, sewerage, etc.
3. Other stakeholders and users, the public, ministries as users of the information, etcetera.

b. The organisational structure and the political responsibilities

1. It is of the highest importance that the idea of the development of a National Spatial Data Infrastructure will get the recognition in the country what it deserves. A National Spatial Data Infrastructure is an important tool for the management of the country. For that reason at least a minister should have the political responsibility for the development, implementation and control.
2. It will be necessary to establish a board of all the stakeholders. The tasks of this board will be the development of the organisational structure of the NSDI taking into consideration the execution of the existing organisations, legislation, tasks.

c. The financial aspects

The idea of the NSDI will require financial resources. However it will also improve the efficiency of all the users, what means it will save money. Because of the shared use of the basis products the shared costs for the individual user of the production and maintenance of the basis products will be lower then in the actual situation.

d. The products and the sustainability

In principle the definition of the products should be discussed and decided in the stakeholder board. However mostly many of the products are already legally defined. For instance the information about the real rights and the topographical maps is nearly everywhere defined in legislation and legal rules.

The sustainability requires a lot of attention. In many countries this is the weak point and in many cases the reason for a complete break-down of all the invested efforts. In the presentation this item will be discussed deeply. Finally a list of conclusions and recommendations will be given based on best practises realised in European countries.

BIOGRAPHICAL NOTES

Jan van Hemert. Born in the Netherlands in 1948.

Master of Science, graduated in 1972, Geodesy, Technical University of Delft in the Netherlands.

Languages: Dutch, English, Spanish, German.

Employed by Kadaster in the Netherlands since 1973, until 1989 in different functions.

From 1989 until today as manager Kadaster International and responsible for many projects and consultancy activities of Kadaster International, mostly in Latin America and East Europe.

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