

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE  
COMMITTEE ON HUMAN SETTLEMENTS  
WORKING PARTY ON LAND ADMINISTRATION

**Workshop "Customer - Co-operation - Services"**  
Vienna, Austria 12-13 September 2002

**Theme II. Customers and Services**  
**GEODATA POLICY IN AUSTRIA**

Karin PHILIPP - POMMER

# Geodatapolicy in Austria

**This article is concerned with the following topics or questions**

- **what do we describe as geodata in Austria?**
- **who works with geodata on the so-called geodatamarket?**
- **why do people and on which basis do people work on this geodatamarket?**
- **what for and towards which aims do people work on the geodatamarket in Austria?**
- **and how and especially in which uncoordinated way this happens at the moment.**

**Because of the fact that the current situation concerning geodata has not been solved in a satisfying way, there developed**

- **multiple parallel tracks, as well as**
- **insufficiencies in the collection and organization of the data,**
- **in the quality,**
- **in their area coverage and**
- **in their accessibility and conditions for users.**

**It therefore has been necessary to develop an Austrian concept for geodatapolicy.**

## WHAT

Various definitions are used to structure and organize geodata. They can be found or used in public or private areas concerning topics like property rights, land use, agriculture and forest management, nature and environment protection, traffic, infrastructure, medicine and economy.

A specific organization of data concerning content is made in "basic data" and "specific data". In this case a distinction is made concerning the layers called "background data" as for instance digital orthophotos and on the other hand "specific data" as for instance the mapping out of a biotope.

Equally a definition of „public geodata“ is made. They fulfill an essential part in the completion of public projects in the areas named before. Also geodata represent a very important source of information in the public sector and they are an integrating part in reformation of administration and government.

Furthermore geodata are distinguished by technical criteria like the following:

- the format of the data (meaning whether these are vector- or grid data),
  - the scale when the data were collected, so to say the resolving of the ground,
  - the content and the structure of the attributes,
  - the coverage of the area and the topicality,
- all this is information, which should be found in metadata.

Also a distinction of geodata is made for land use criteria: in this case we deal with:

- who is the legal owner of the data,
- who produces the data,
- who offers them,

- who uses them,
- who holds them or
- who offers information based on them.

Furthermore it is important for which purpose the data are used, that means if there

- is only officeintern use or
- if the data are used commercially, if they are copied and multiplied or if they are given to further users.

According to the use the price is calculated.

For 15 years geodata have been used and collected on a broad range in Austria.

These are:

- official topographic maps, which means the Austrian maps 1:500.000, 1:200.000 and 1:50.000,
- data concerning landownership, represented by the digital cadastermap DKM or the landownerdatabank GDB,
- satellite images,
- digital orthophotos,
- geodata concerning landuse like digital developmentconcepts, prospected landuse-conceps, plans and maps for future building ideas or regional maps,
- geodata concerning soils,
- forest, forestmanagement and forestdevelopment,
- hydrography and waterrights.

Furthermore geodata are offered on the following topics:

- resources and miningsites,
- nature and environmentalprotection,
- data on traffic, railroads, flights and shiproutes and
- data on infrastructure concerning medicine or social criteria or
- data about infrastructure for protection against catastrophies or infrastructure for leisuretime activities.

## WHO

The legal administration of geodata in Austria is done by

- the federal Weights and Measures Office BEV,
- the countries (the federal states),
- the cities and communities.

Especially in the case of federal states the development and organisation of compatible GIS as well as the teamwork among those has been very fruitful.

In addition to those there are:

- private companies,
- civil engineers,
- institutions with public and private duties as producers and holders of geodata, like energysuppliers, the Austrian Forest Administration, the Mail services and professional associations etc.

## WHY

The motivation to produce and to offer geodata is based on a legal need and interests of the private businesses. Legal basis are various federal and countrywide laws like:

- landsurvey law,
- landregister law,
- environment-information law,
- wastedisposal law,
- forest law,
- water law,
- environmental-planning law,
- nature-protection law,
- law on the help in catastrophies

## WHAT FOR

To use geodata in private economic businesses is without limits and the different applications reach from the development of navigation systems to the planning of skiing slopes.

The variety of geodata which has been collected over the years which is provided for users from federal offices and the economy as well as civilians can be obtained in many different ways:

- many geodata are delivered as original GIS geodata , for instance in Lower Austria it is possible to order these data via internet.
- furthermore in many federal states online-information services via intra- or internet are offered
- or multiple analogue map products based on geodata can be bought. They are available at the BEV (the Weights and Measures Office) or via internet in Carinthia and Salzburg.

## HOW

As mentioned before, has the miscoordination of the Austrian datamarket lead to inefficiency, high costs and therefore to uneconomic losses.

Also for the many, partly only potential users there are too many questions that remain unanswered, like:

- Who is the responsible agency for a specific database?

The example of data concerning the addresses shows the problem: there is one office which is responsible, but there are many other offices, which collect address data and this is done in an uncontrolled way and especially only for their field of interests. An Austria-wide use of high quality and standardized data is currently not possible.

Further open questions

- Which geodata are available in which quality?

- Are all geodata available covering the whole country?  
There are too few metadata, and if there are some available then they are not compatible.

Also the question

- Why are some geodata in multiple editions available?  
can be asked and shows its redundancy, when it comes to the maps available on streets and infrastructure with its multiple attributes in Austria.

For many geodata the answer is

- Is the structure of the data and the quality userfriendly - is it suitable to current norms and standards?

"unfortunately no". That is the reason why a lot of resources and time go to the conversion of data amongst various systems instead of keeping the data on the latest and modern standards.

One question that has been eagerly discussed lately is the one:

- Who is the owner of geodata?

The office ordered? the one who ordered their collection or processing? The producer the federal bureau? The public? The citizen ?

Answers are tried to be found in the copyright, user right and so on.

A different number of questions make up the following points:

- Where and how can geodata and information based on them be obtained? From the various offices? Is the marketing to be seen as the duty of public bureau ?
- How high are the costs of geodata from their origin, how valuable are they, at what price are they sold?
- Can all geodata be given away? Are there restrictions in data security or also because the infrastructure for marketing them is not well enough developed.

All in all there remains the question

- Who sponsors geodata ?

## **GEODATAPOLICY**

Because of the fact that many geodata are "public" geodata help can only come from a so called "Austrian Geodatapolicy".

"Public geodata " are primarily necessary for executing the Austrian laws and in the fulfillment of public duties.

In their marketability they cannot be refinanced, on the other hand they have to be kept and collected countrywide - independent from temporary and economic interests.

Geodatapolicy has got the aim to provide "official" geodata on a large scale.

In the fall of the year 2001 the workgroup called "Geodatapolicy" was ordered by the federal bureau to develop a "concept for Austrian Geodatapolicy". Many workgroup meetings of distinguished federal states and representatives of the BEV came up with a final statement. This one is currently being discussed in the conferences of directors of the federal states. They want to draw conclusions in order to give out new guidelines.

To make geodata policy work it is primarily important that the federal bureau the countries and the towns agree on binding measures that are named as follows:

- (1) The availability of public geodata should be covering the whole area of Austria, it is authentic and has to be secured in defined quality.
- (2) The responsibility of who does the collection, the administration and the services dealing with geodata has to be defined.
- (3) The systems of databases (like content, structure, administration, metadata) for "public geodata" has to be standardized and legally certified.
- (4) The availability and the use of "public geodata" are clearly and unmistakably to be defined and especially amongst official bureaus they should be compatible at low cost and little administrative efforts.
- (5) The installation and work of "public geodata services" should enforce the use of public geodata.
- (6) The value potential of geodata has to be enforced for the economy and research.
- (7) The communication and cooperation among offices that deal with each other on behalf of public interests has to be made easier.

Due to the proposed measurements massive savings and rationalisation effects can be created in the public field.

In addition to that the already existing value and potential of geodata in the public field will be more and more useable for the economy.