

**Research Group**  
**„Information System Site Specific Agriculture“ (IKB - Duernast)**

**Partial Project 6:**  
**Development of an information system for the recording and storing of spatially variable data**

Hubert Linseisen  
(Professorship for Operations Research and Information Management)

The registration cost of all relevant data of the on farm activities is one of the main problems with the use of decision support management aid in agricultural businesses. For instance cost accounting is dependent on many individual data because these data have to be registered very specifically if they are to give meaningful interpretations. The state of technology today allows for automatic recording in some areas. However, the standardisation of the form of data transmission and data savings in a logical respect still causes problems.

Thus, the goal of the research project is the development and realisation of a concept for data transfer from the mobile process technology using LBS to an office PC. For this, the logical contents (i.e. the data quality) of the data to be transferred has to be defined. This defining is occurring in close co-operation with the agricultural engineering group. In contrast, the technical structure of data transfer is already sufficiently specified by the LBS concept.

Building upon that, the next goal of the project is the design of a database which stores the data and allows flexible interpretations. This database contains the quantitative framework of all activities of sub-field specific cultivation. It is also the basis for economic interpretations and statements for the use of spatially variable cultivation.

→From the office PC to the process technology in the field, the interface in the logical respect has to be well developed so that sub-field cultivation, planting, spraying and processing can be specified and transmitted in quality and quantity using this data base.

In this project the data flows documented in order to guarantee understanding and give support for those interested, i.e. software companies.