RACE PROJECT R1073

GEOTEL

ISDN-APPLICATIONS ON 64 KBIT WORKSTATIONS IN GERMANY SEEN IN A EUROPEAN CONTEXT

INTRODUCTION

This study is based an the following work packages which were already delivered, and will therefore be incorporated into the study:

120 (Existing Database Study)(3 MM)
121 (Database Selection)(2 MM)
122 (Information Suppliers)(2 MM)
123 (Accounting)(2 MM)
The work package 130 (Data Conversion)(2 MM) will be dealt with under the heading 'Applications for Germany'.
220 (Low Cost Work Stations)(1 MM)

The following work packages were already taken into consideration when the study was planned:

240 (Local/International Services)
320 (International 64 Kbit Stations)
380 (Security)
390 (Conformity with International Standards)
490 (Marketing Prospects)

When undertaking a study in Germany, it is necessary to look at the studies which were already established by the other partners of the GEOTEL contractors. This would make it possible to generate information about Germany which would be more easily compatible with the earlier findings.

GOALS

The objective of this study is to analyse the current structure of the German Database Market (GDM), and to discover possibilities for future pilot applications in the national/international ISDN-Network.

ANALYSIS

Means of Communication.
The possibilities for database application cannot be defined and verified without preliminary consideration of the actual network conditions. The following is a list of the transport means which will be discussed in the study, and is organized according to their historical roles.

"Traditional" (public) means of communication

* Telephone (twisted wire)
* Package switched networks DATEX P 10, DATEX P 20, DATEX L (all X.25)
* BTX (Data network)

Means of communication (private)

* Stand/lease lines up to 64 Kbit
* Ocean cable
* Satellite

"New" means of communication

* Satellite connections
* ISDN

The ISDN theme is discussed here in greater detail than the others which were mentioned before, and is outlined below.

Data about the existing state of the ISDN technology and application in Germany:
* The 1 *TR 6 Protocol...*
  ** technical frame
  ** time frame
  ** economic conditions

* The origin of the ISDN will be discussed as the previous version 1 R 6 *Protocol*
  ** why ISDN?
  ** pilot applications
  ** experiences

The *European protocol*
Until now, the applications have been run on a German based protocol. That is due to change on (of the latest) 1.January 1993.

Applications in Germany

The first step is to explore the market for online databases / information systems in Germany. In the process, it will be necessary to study the special conditions in the German Market, in particular:
* the impact of the regional, decentralized structure which will become even stronger with the establishment of the new German states in the current East German territory
* the new dimension of the whole German Market
This analysis will be directed by our reference to the potential interests of the Partner groups.

Some of the key questions which will be considered are as follows:

* Which networks are used?
* Which kinds of databases are used?
In order to answer these two questions, the following elements should be taken into consideration: costs, data formats, human interface, network load and availability, security and speed (refer to Introduction).
* Which factors influence the decision making process that leads to the use of a database service?
* Do the network design and contents actually meet the expectations of current information users?
* What are the weaknesses in the current set-up, and how can they be improved to meet the user's needs?

Applications for Germany

The service profile is first defined by the requirements of the participating companies in Great Britain, France and Greece (GEOSTOCK, SPECTRUM, etc.).

* Under which conditions can these services be adapted for the German Database Market?
* How Jong would it take to do it?
* How much would it cost?
* With which partners in Germany could it be done?
* With which hardware equipment?
These questions have to be answered in order to understand how these services could be offered in Germany.

Data Sources

Possibilities already existing include use as a public database (PATENTS, NORMS, PUBLIKATIONS) and use as a corporate database server.

In this context, it will he more important to concentrate an locating those potential applicants who have a great interest for such a product, and who have a high growth rate, than to locate all potential customers.

The offers and possibilities for use will be handled in greater detail in the case of two Pilot addresses, namely:

* Deutsches Patentamt
  Europäisches Patentamt, München
* Deutsches Institut für Normung (DIN) e.V.
  Deutsches Informationszentrum für technische Regeln (DITR), Berlin

POTENTIAL CLIENTS

After having delivered the general description (analysis),
it is necessary to connect these new technologies with the potential clients and their application needs.
The deciding criterium for addressing potential clients and implementing a new application is the following: does the potential client already have applications with or in other networks? Or do applications have to be newly installed?

Therefore, two general things have to be established:
* Case studies
* User profiles

In all of these cases, it will be interesting to see if German branches of international corporations are interested in the applications as they are currently operating in France and the UK.

Some of the following questions will be used as guidelines for this gart of the study:

Do GEOTEL's expectations, regarding the user's will to work with PCs,
meet the interested party's intention?
** Specific hardware in use, degree and circumstances of usage
** Specific type of hardware required for GEOTEL usage?

Acceptance of MS-DOS as the required operating system.
** Introduction of Multi-Task concepts

Applied concepts of user's information processing
** contents
** routing
** technical (data formats, network service)

Which languages are accepted
** for documents?
** for the human interface?

DATA SOURCES

Looking at it from the customer's perspective, this service may be used:

• as a public database
* as data collected from various project members
* as a corporate (private) database server

In regard to the above mentioned addresses, the study will then be oriented toward the offers of the public access databanks.

In this context, it will be important to find out to what extent the services of this type which are offered in the neighboring countries meet the specific interests of the potential German clients.

The "Main Objective" of the project will also concern itself with the following regarding the user: finding pilot addresses, and then analysing any specific interests or wishes that the user may have.

The last section, "MARKETING", ran only then be successfully completed when the above mentioned case studies and user profiles adopt a European oriented approach. As a result of the preliminary study, some of the leading companies whom we have already established contact with in the chemical and petroleum industries will be addressed. Any specific wishes and/or needs that they have will then be considered.

PROPOSALS

In order to make this service available in Germany, the following steps have to be taken:

* As a first technical examination, the French system should be tested in a regional ISDN Network.
* This will be done using data collected by the different project members.
* After the system is successfully locally tested, the gateway to the French and English server has to be established and tested.
* It can then be used for demonstration purposes for potential customers.
• A pilot application should only be installed in a potential customer's office after successfully passing these steps.

MARKETING

For formal reasons, this aspect cannot be an ingredient of the study; in spite of this, its appearance in this part of the study is unavoidable for the following reason: each (first) contact with a bearer of information can at the same time be the beginning of a pilot application - and with it finally a business relationship.