THE KEY ISSUES OF IMPLEMENTATION AND CERTIFICATION OF ISO 9001 QUALITY CONTROL SYSTEM IN GEODIS BRNO, spol. s r.o.

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1. INTRODUCTION

"ISO 9001 Certified" - this statement is found on all the commercial materials of GEODIS BRNO company. This statement is a result of a lengthy and complex process signifying that GEODIS BRNO and other companies have quality assurance and management programs that meet the stringent conditions of the internationally accepted ISO 9000 standards. GEODIS BRNO, Ltd. is one of the first private companies which obtained this licence to carry out geodetic and photogrammetric services in the former Czech and Slovak Federative Republic. The firm was founded in July 1990 as a Czech-Austrian company. GEODIS BRNO, Ltd. has three departments at this time: Department of Photogrammetry, Department of Geodesy, and Commercial Department. GEODIS BRNO, Ltd. has been implementing quality control system according to ISO 9001 standard since July 1997 and was certified on June 1999 by TÜV Berlin.

This paper contains the following sections:
- the advantage of obtaining ISO 9000 Certification
- role of the consulting company in the implementation process of Quality Control Systém
- documentation requirements for certification
- "Key People" - key to successful certification

These sections correspond to the crucial points of implementation and certification process of Quality Control System, identified by GEODIS during implementation process.

2. THE ADVANTAGES OF OBTAINING ISO 9000 CERTIFICATION

The ISO certification process includes an audit of a company's quality systems by a third party. As ISO certification has been once achieved, the process never ends. Auditors return on a regular basis to verify that standards are being upheld. It is important to keep in mind that ISO certifies the process leading to an acquisition of a product or service, not the product or service itself.

The ISO 9000 standards cover all companies of all sizes, both service and manufacturing. The standards comprise three standards:
- ISO 9001: Quality assurance in design, development, and production
- ISO 9002: Quality assurance in production and installation
- ISO 9003: Quality assurance in final inspection and test

Within a company, ISO certification provides many benefits concerning production, manufacturing, contracting with suppliers, and legal requirements. Being registered to an ISO standard, the company's energy focuses on quality and consistency.

In a world economy, where most companies depend increasingly on other companies when providing parts of their products or services, quality standards have become

essential. The ISO 9000 standard is rapidly becoming the quality standard throughout the world. More than 80 countries as diverse as England, Colombia, Canada, Germany, Israel, and Turkey have adopted the ISO standards.

The ISO standards is a quality guarantee for the production process and development of a product or service, not the product or service itself. Perhaps the most cogent reason for seeking ISO certification is the marketplace itself: customers are beginning to demand certification.

3. ROLE OF THE CONSULTING COMPANY IN THE IMPLEMENTATION PROCESS OF QUALITY CONTROL SYSTEM

In the initial phase of the project implementation GEODIS decided to take an advantage of the services provided by a consulting company. According to the firmly set criteria, a consulting company of MBK Brno, accredited in the PHARE Quality Program, was engaged. Its accreditation ensured us not only about the good choice in the partner searching phase, but also about the financial support provided by the PHARE Fund for the implementation project of Quality Control System. Our previous experience showed that the co-operation with experienced supervisors significantly shortens and improves the preparation for implementation. The supervisors increased our confidence by using Certification Company Methodology, by their experience with needed certification standards, and by their ability to prepare us sufficiently for the process.

4. DOCUMENTATION REQUIREMENTS FOR CERTIFICATION

Documentation control is a critical element of International Standards Organisation (ISO) certification. The greatest reason why companies fail their ISO audit—document control problems—causes twice as many failures as the second most common reason. Documentation review is usually the second of six steps in the certification process (application, documentation review, pre-assessment, assessment, certification, and surveillance). If an applicant fails the documentation review, the certification process stops right there. The phases include 20 quality-system requirements (sections). Each section contains this statement: "the supplier shall establish and maintain documented procedures."

ISO 9000 registration requires four levels of documentation:

- Level I consists of a quality manual that outlines what a company plans to achieve and outlines the policies it plans to implement to achieve its goal.

- Level II outlines procedures the company will follow, what employees will do, in what order, by whom, and with what results, structured to reflect the process flow of events.

- Level III consists of detailed work instructions—specific written information on how to do a particular task.

- Level IV consists of reference material and information not in other categories. In GEODIS, this information includes quality records, forms, and so forth.

The complete process of ISO 90000 implementation and certification typically takes about two years. Certification is achieved through an on-site audit and assessment of the company's quality system by independent auditors, including the quality policy, quality

system documentation, and quality records.. When performing the document review, auditors look at the following:

- Intent of ISO 9000 standard. How well does a documented system stand against the ISO standard?

- Implementation. Do people within the company follow the documentation? Is the documentation readily available?

- Effectiveness. How well does a documented system work?

But there are also some general requirements for the documentation itself. We can summarise this requirements as follows:

- Documentation must be controlled.

- Documentation must be available for auditors' perusal.

- Documentation must be easily accessible.

- Documentation versioning is necessary.

- Evidence of approval for each document must be available.

- A master list identifying revision status of documents must be readily available.

Looking closer at these requirements your first idea will be probably to find some fully automated documentation control software system which would provide you with all of the necessary services mentioned above. Unfortunately there is not too many systems on the market which are able to solve what you need to be solved and at the same time fit in the budget of small or medium company with its price. Actually there was no system like this in the Czech market at the time when it was necessary to manage this demand in GEODIS. Our decision was to try to find at least some version control system and set up the methodology how to use such system as document control system. Our first choice after careful analyses of the system features and properties was Microsoft Visual Source Safe. Visual SourceSafe provides all this required functionality and even more.

The top ten reasons for using Visual SourceSafe as a document control system:
1. It is available for multiple platforms, including the Windows® 95 operating system; Windows 3.1 and Windows NT® operating system for Intel, MIPS, and Alpha AXP and Macintosh®.

2. It stores any kind of file, whether text or binary.

3. It provides both a graphical user interface and a command line interface.

4. It uses a small set of commands that are intuitive and easily mastered.

5. It is designed to work in client-server environments. Typically, the Visual SourceSafe database resides on a server. Client installations contain the

executables and auxiliary files necessary to gain access to the database.

6. It tracks the history of every change to every file and every project.

7. It contains a highly customisable, easy-to-use security system.

8. It is easy to view the contents of a file.

9. It is easy to generate reports containing the revision history of any file in its database.

10. It has an enormous capacity for files, holding over 8,000 files in a single project and as many files and projects in its database as your hard disk can hold.

The Visual SourceSafe version-control system features an easy-to-use interface that is similar in appearance and use to the Windows 95 Explorer.
Visual SourceSafe is a version control system with a difference: rather than being file-oriented, like most version control systems, it is project-oriented. This means that in addition to performing actions on individual files, you can deal with files as a group—a much more efficient way to control documents. Instead of a separate operation for each file, you have just one operation for a group. If a particular project contains a dozen files, you can check out all twelve from storage with one command rather than with twelve separate commands.
All files are stored in the Visual SourceSafe database, but only the most recent version of a file is stored in its entirety. Only the changes to previous versions are stored in the *reverse delta* system. This system saves space on your hard disk. When an older version of a file is needed, Visual SourceSafe can easily recreate that version.
Visual SourceSafe contains a large number of tools to simplify the task of version control and document storage. These tools include a report generator, a history tool for showing history of projects or individual files, tools to identify differences between versions of files, a tool for finding strings in text files, and a tool for viewing files.
Utilising this system in the first steps of implementation of ISO 9001 we find out that thanks to its project oriented approach we can easily use this system to control production of our projects. Our original idea was to use this system only for the first two levels of ISO 9000 documentation but nowadays we are using this system in all the production process of our company.

5. CONCLUSION: "KEY PEOPLE" - THE KEY TO SUCCESFULL CERTIFICATION

One of the key moments of the Quality System Implementation Process is the individual responsibility of management staff and employees for the introduction of different quality elements into the working process. That was why the most experienced employees of the company were involved in this process. Following the methodology of the consulting company, a team of experienced and engaged "Key People" was formed, and it was together with the team of internal auditors trained by the consulting company at the beginning of the implementation process. Thanks to the creative work of these people, we managed to set current and introduce new procedures of Quality Control as required by ISO Standards.

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