

Case study No. 1

System documentation and User manual for aviation backup system

(5/1999 – 1/2000 and 10/2000-7/2001)

Customer

Engineering company in Vienna, Austria

How it began

The customer was a sub-contractor in a project between a German authority and an aviation technology company in Vienna. The project was intended to be managed with the V-model and was QM-controlled by an external, third company.

At the beginning of the projects several documents existed:

- contracts
- project purposes
- requirement specification

A system architecture document was due to a given date, but the developing engineers hadn't yet had the time to compose it. Thus time pressure was high.

As text system Microsoft Word97TM was used, mainly because of its comment and track change functions and also the high usage in the involved companies.

How it was done

In May 1999, the system architecture document according to the QM requirements was created and filled with content within four days. The following coordination and discussion concerning the contents went on for the next months. Due to the geographical distribution of the team members, the coordination of the virtual team was mostly done via email and telephone calls in combination with rare meetings in Vienna.

Following the system architecture document, the requirements list and the test specification were created.

The writing for the user manuals began in the end of 1999. At this time it was already clear that only one out of three planned modules would be completed till the official due date. This led to the announcement of a so-called 'interim solution' for which the user manuals were done and accepted.

Later these manuals were adapted to last minute changes of the software and system by the developers.

Follow-up order starting 10/2000

In the middle of 2000 the engineering company had left the project, and so it was continued by the aviation technology company. The software development for the other two modules plus a restructuring of the first module was given to a sub-company in Slovakia, so the project now had team members in Germany, Austria and Slovakia with German and English as project languages. Coordination was again done by email and telephone with working meetings in Vienna and Bratislava. The manuals were prepared in Bremen.

Due to project delays the development phase was much longer than expected and took nine months in whole.

Conclusion

Working in virtual teams is no problem with modern technology. Access to documents and even online tests is arranged easily, saving time and money.

However, there are necessities that cannot be ignored. "Must haves" are:

- sufficient language knowledge in the main project language
- proficiency in the usage of internet, email and text processing systems
- basic teambuilding to prevent typical problems like misunderstandings and desiderative commitment
- sufficient important information given to all team members (and before this: clearance of what 'important' means)

Typical project delays in IT development often lead to long waiting times for the technical writer, followed by high work load in the end of the project. A freelancer can usually organize his/her work according to these special needs in software development without raising costs.