## **Job Defintion**

1st October 2013

Good morning,

Due to your excellent work as a software engineer in your company, Excellent-Software GmbH, and your experience in the application field, you have been promoted to a software project leader. You could not gather too much experience in that area in the past, however, your boss is confident that you will manage the new project well. So, he expects you and your group to deliver the product on time and, of course, with the desired quality.

Your first assignment is the development of a new accounting system for "Meyers & Co". Besides others, they also want to get the accounting department ready for some important change- overs planned in spring next year.

A former colleague has already met the customer several times. He assumed to have collected all customer requirements. He has also taken some notes. Based on his requirements analysis, cost estimation was performed. The system comprises about **200.0 Adjusted Function Points** (AFPs). Since the system should be implemented using Ada95 this corresponds to approximately **9800 lines of code** (LOC).

Since the system must reflect the change-overs planned in your customer's company, you must end the project at last on  $30^{th}$  June 2014. This means you must complete the project in 9 months. An extension of time is hardly possible. Until then, the customer requires a product which satisfies his requirements concerning the completeness and correctness of the system (see below).

Because of the narrow time plan, the customer will agree to a compromise and gives you a budget of **225,000.0 EUR**.

There are a couple of developers available, i.e. they are currently not assigned to other projects. You can select and assign some of them to your project. You don't need to choose notations for the different documents. The customer has already decided that the code must be written in Ada95 and the manuals must be written in German. This is also true for all possible internal documents.

Since the accountancy is very important, the customer requires that the **code** contains at least **95.0 percent** of all his requirements.

Furthermore, the customer demands that the code contains at most **12.0 errors / 1,000 LOC**. He will control that by performing an acceptance test. In cases the accounting system produces wrong results caused by software errors this may ruin your customer.

Since the accountancy is very important, the customer requires that the **manuals** contain at least **95.0 percent** of all his requirements.

Since the system will be used by different, partly inexperienced users, the customer requires that the manuals hardly contain any error. Each **page of the manuals** should contain at most **0.5 errors** per page.

And now: Good Luck!