

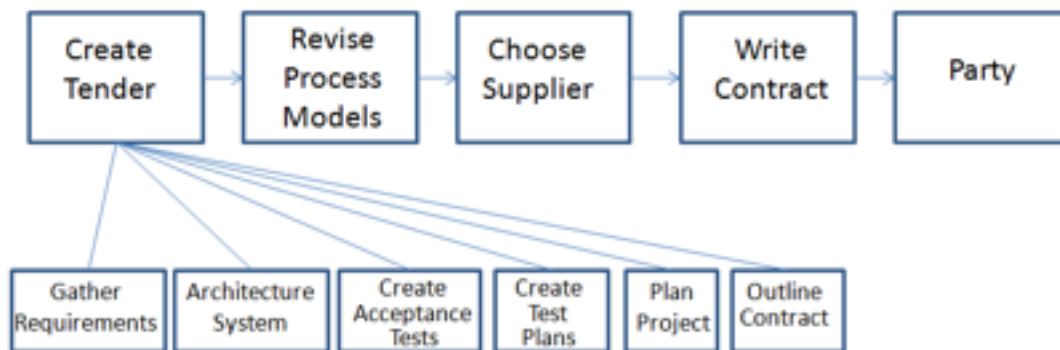
Assignment 4

Contract Writing

Deadline: See separate specification

Roles involved

- Process Owner: Mrs. Mira Kajko-Mattsson
- Process Executors
 - External Consultant: Mr. Bengt Koren
 - Practitioners: IV 1300 Students



Process

You have been chosen to be a tenderer. **Congratulations!!!** This means that you have a chance to win a contract. However, you have to keep in mind that other companies might have been chosen as tenderers as well. So now, even more serious work starts. In this phase, you will have to get a good understanding of software requirements, you will have to create a software architecture, you will have to create test plans, you will have to revise the software system price, and the like. During this phase, you may have to have some meetings during which you will have to clarify requirements. When meeting your customers, you will have to follow dress code and code of conduct (See Appendices D and E). This phase will consist of five phases where the first two phases will more or less take place simultaneously. They are the following:

1. Create Tender (see Appendix A)
 - a. Deliver to your customer.
2. Revise your process models (see Appendix B)
3. Choose Supplier
 - a. Have an Advisory Board meeting within each customer company (see Appendix C)
 - b. Consult the external consultant for assuring that each supplier is assigned to one system.
4. Write Contract and follow “**Dress Code**” and “**Code of Conduct**” (see Appendix D).

5. Social Event!!!

- a. Now, you may socialize with your customer. Make sure that you have a party during which you get acquainted with your customer. In our case, please remember that you are both customers and suppliers. Therefore, you will have to have two parties.

Phase 4 Deliverables

The assignment will result in the following deliverables:

- *Tender documents*
- *Contracts*
- *All the minutes of the meetings, if any.*
- *A specification of all the changes made to your processes (see **Appendix B**)*
- *Effort required for the tendering phase in the BCPM.* The effort should be provided for each task and individual practitioner/student and it should compile the results for the whole company.
- *The company's expenditures so far to be delivered by the Financial Manager.*
- *Experience gained during this phase.* Here, you list problems, good sides of the BCPM process phase, important decisions made and motivations behind the decisions.
- *All the documentation is delivered to Bilda "Phase 4 Deliverables".*

Appendix A Create a Tender

This phase consists of six phases. They are the following:

1. *Gather Requirements*: In this phase, you, as a supplier, will make sure that you have understood user requirements. After you have done that identify system requirements. As has been presented during lectures, one user requirement may result in several system requirements. Use parent-child template for visualizing relationship between the requirements. The template is to be found in Mira's book chapter to be provided in Bilda.
2. *Architect the System*: While you are gathering requirements, you, as a supplier, may start creating the system's overall architecture. It will help you communicate on the requirements and validate them.
3. *Create Acceptance Tests*: You, as a customer, will define acceptance tests. Use testing template as suggested on the testing lecture. You are welcome to use use cases for deriving test cases.
4. *Create Test Plans*: You, as a supplier, will create test plans and define system tests. Do not forget to include the acceptance tests and schedules in your test plans.
5. *Plan Project*: You, as a supplier, outline a project plan and important milestones and deliverables. When planning the project, do not forget to pay heed to non-functional requirements. In some cases, implementing non-functional requirements may be more effort-intensive than functional requirements.
6. *Outline Contract*: When outlining the contract, make sure that you cover all the information that you have agreed upon with your customer. Here, you consider the following:
 - a. *Obligations of Software Acquirer*: Here, you state all the tasks, rules, etc. that the acquirer is obliged to fulfill. For instance, you may request that the acquirer be present during all the major inspections or important meetings during development.
 - b. *Obligations of Software Developer/Maintainer*: Here, you state all the tasks, rules, etc. that the supplier is obliged to fulfil. For instance, you may state that the developer must inform the customer of risks that might jeopardize the system delivery.
 - c. *Acceptance Criteria*: Here, you state all the criteria that must be fulfilled. For instance, the system will be accepted by the acquirer only when all important documentation is delivered and manuals are created by 90%. What is "important documentation" is left to you to decide together with your acquirer.
 - d. *Charges for changes*: Here, you, as a supplier, state how much each change will cost. Please observe that different changes may have different change impact. Therefore, you may have different charges for different change types. Minor changes to code are not costly. However, major changes to requirements may be very expensive.
 - e. *Confidentiality*: You, as a supplier, may use new technology/ideas when developing the system. You do not wish them to be spread. Therefore, you may request from the customer that he should not disseminate information about it. Your, as a customer, may have to reveal a lot of confidential information to the supplier. Therefore, you, as a supplier, must assure your customer that you will keep the customer information confidential.
 - f. *Price, Fees & Expenses*: Here, you, as a supplier, state what the system costs, what is included in this cost and what is not included. Then, you provide a list of additional items that may need to be paid. For example, the system price may include the system cost plus training of super users. It does not however encompass training of all users. It must be paid separately. The price does not include travels to the customer premises, etc. You, as a

customer, do not forget the late delivery fee. How much should the developer pay you in case the system delivery is late?

- g. *Payment*: Explain how the payment will be provided. Here, you may request that the customer pays some amount of money in advance. The rest will be paid after the system has been signed off.
- h. *Intellectual Property*: This is related in some way to confidentiality in some cases. If the system is the result of some ingenious creation of mind, you, as a customer or supplier, would like to set exclusive patent rights. Therefore, you will have to state here how you wish to manage this sensitive issue.
- i. *Force Majeure*: During development, anything may happen unexpectedly. For instance, some country may declare war on Sweden, an earthquake or floods may unexpectedly take place, or aliens may invade the Planet Earth. Therefore, you will have to agree how this will be managed. Usually, events of this magnitude free both parties from fulfilling their obligations under the contract. Here, you list the events during which you would like to be freed from your obligations as a customer and as a supplier.

Appendix B Revise Process Models

Your process models will never be optimal. Now, when you have customer requirements, it is a great opportunity for you to check whether your process models are good enough for developing your customer systems. You, as a representative of each role, revise your respective process models. In cases when major changes need to be done, you will have to submit them first for inspection and then to the Advisory Board for decision making. All changes and motivations behind them must be documented.

Appendix C Choose Supplier

To choose a supplier in a classroom is a difficult task. It is difficult to simulate industry. However, we will give it a try. First, you, as a customer company, will have an Advisory Board meeting during which you will determine which supplier you wish to have. Document the results in the minutes of the meeting. However, be prepared that it may be difficult to get the supplier you wish to have. Your favourite supplier might have written tenders for several customers and you might not be his favourite customer. Therefore, you will have to satisfy yourself with another supplier. The decision on which supplier each customer will get will be done by the external consultant.

Appendix D Contract Writing

Contract Writing will take place immediately after you have chosen the supplier. Make sure that you prepare a contract using the template from Lecture 3. During the contract writing, you should strictly follow the dress code. According to Figure 1, you should follow the *Business Informal* code.



Figure 1. Dress Codes

Appendix E Code of Conduct

Code of conduct is very important. It helps you guarantee success and make your meetings more productive. When meeting your customer/supplier, make sure that you are formal. Below, we list behavioural aspects that you need to follow:

- Shake hands and present yourself.
- Make sure that you talk to the person and not to the floors or walls. That means that you should get some level of eye contact.
- If the meeting is for the first time, make sure that every participant presents herself/himself:
 - Name
 - Role within the company
 - Role during the meeting
- Follow the meeting agenda
- Announce that the meeting is over and announce its result.

In addition, remember the following issues:

1. **Start on time and end on time.** Clearly communicate "start" and "end" times for the meeting. Apologize for the delays. Please remember that one hour of four highly paid individuals may cost at least 10 000 SEK.
2. **Have a written agenda:** When having formal meetings, you should always have a documented agenda. At the beginning of the meeting, make sure that all the parties agree to it.
3. **Appoint a moderator/facilitator:** All important meetings should have moderators. The moderators may be chosen in advance or on the spot. His role is to follow and control the agenda and guide the meeting.
4. **Appoint a secretary:** All important meetings should be documented. Appoint one person to be responsible for creating minutes of the meeting. It may be the same person as moderator.
5. **Focus on the discussed topic!** If you wish to discuss other topics then wait until the topic under discussion has been fully discussed.
6. **Only one person should speak at a time.** Do not have any side conversations. It's thoughtless, rude, it distracts the discussion and it may be counter-productive.
7. **Speak up!** If you feel you have something to contribute to the discussion, then speak up. Everybody's opinion should be heard.
8. **No whining.** Be positive in your comments. If you have to criticize then provide constructive criticism. Avoid judgment and always try to suggest alternatives.
9. **Spare the oxygen.** Don't dominate the conversation or try to impress.