



**Project Name**  
**Project Plan**

**Version**

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Project Plan	Date: 2002-00-00

## Revision History

Date	Version	Description	Author
2002-00-00	0.01	Initial Draft	

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## 1. Introduction

### 1.1 Purpose of this document

The purpose of this document is to assist in the planning of the development of the project 'Real-Time Bridge Monitoring', as a part of the Distributed Software Development course. This document will be the starting point and first deliverable of the project. It is essential for the beginning phase of the development process, and will be slightly updated throughout the whole project.

### 1.2 Intended Audience

This document is written primarily for the development team. The crucial planning decisions will be recorded in this document, so the development team will use it as a guidance while planning their time, splitting tasks and it will serve as a basis for the next phases of the project.

Also, this document is intended for the supervisors, in order to give them insight into our initial view and plan of the project.

### 1.3 Scope

This document will have main focus on the organization of the team and planning and distribution of work during the development process.

Firstly, the background and objectives of the project will be briefly explained.

After that, the organization within the team will be shown, regarding the distribution of work and responsibilities of each team member. Also, the stakeholders of the project will be introduced.

The development process that will be used in the development of the system will be presented in the fourth section. Here there will also be a brief description of each increment of the system.

Each deliverable will be described in the sixth section. This part will be updated throughout the project in order to record the delivered products and documents, and passed deadlines.

Further on, the inputs to the system will be presented. The inputs present the data that will be received from the customer and be processed by the system.

The document will also cover communication tools and conventions that we have agreed upon. In this chapter, it will be described in details how the information flow should look like.

Finally, configuration management and the project plan will be introduced. The project plan will cover the main planning decisions main about the project, regarding time, milestones, activities. This plan will be represented in an intuitive way, by using tables, charts and gantt-charts with timestamps.

### 1.4 Definitions and acronyms

#### 1.4.1 Definitions

Keyword	Definitions

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#### 1.4.2 Acronyms and abbreviations

Acronym or abbreviation	Definitions

#### 1.5 References

## 2. Background and Objectives

*Describe (in general) goals of the project. Describe (in general) project requirements, milestones, deliverables, testing, product delivery.*

**TEST TEST TEST!**

## 3. Organization

*Describe project composition (team members, distribution of team members, roles defined in the project team. State tools used to support the development process (emphasize should be on tools supporting project management, collaboration, not development tools such as Eclipse, C compiler ...)*

### 3.1 Project group

The project group consists of seven members all together. There are three members from the Italian side, that are coming from the Politecnico di Milano University: Andrea Bottoli, Lorenzo Pagliari and Marko Brcic. The other four members are from the Mälardalens University: Dzana Kujan, Miraldi Fifo, Jorn Tillmanns and Nikola Radisavljevic. Their roles in the group are defined and represented in the table below.

Name	Initials	Responsibility (roles)
<b>Andrea Bottoli</b>	<b>AB</b>	<b>Project Manager</b>
<b>Dzana Kujan</b>	<b>DK</b>	<b>Team Leader</b>
Marko Brcic	MB	Developer ??
Lorenzo Pagliari	LP	Developer ??
Miraldi Fifo	MF	Developer ??

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Jorn Tillmanns	JT	Developer ??
Nikola Radisavljevic	NR	Developer ??

//TODO describe each role in more detail (when the roles are given)

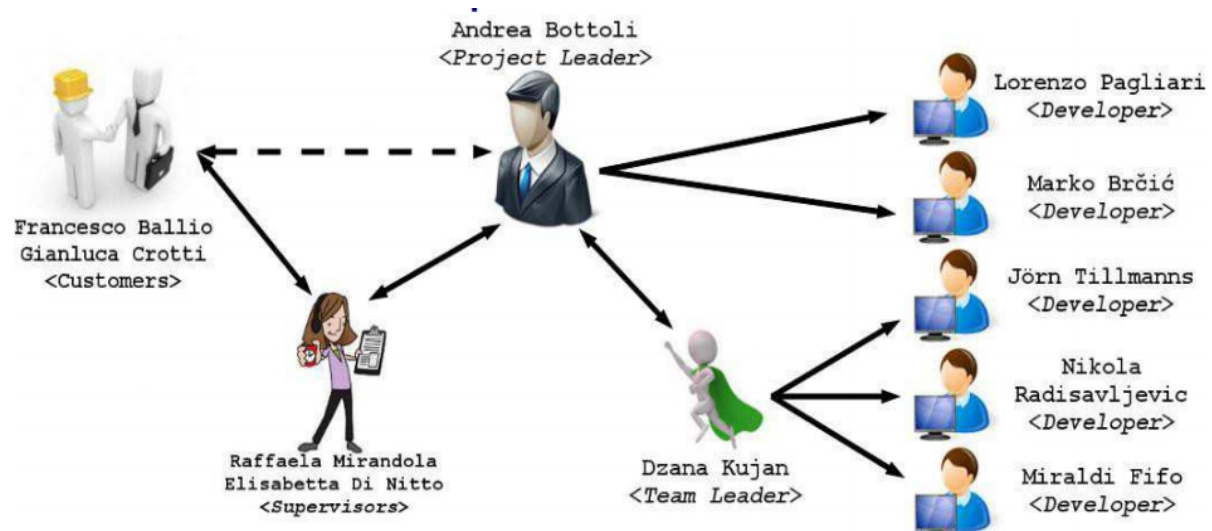
### 3.2 Customer

There are two customers in this project. They are Ballio Francesco and Crotti Gianluca.

### 3.3 Supervisor

There are two supervisors in this project. They are Mirandola Raffaella and Di Nitto Elisabetta.

This organization structure is better depicted in the following picture.



## 4. Development process

Describe development process used to build the product, project phases. Describe specific roles in a development process used (for example scrum master, product owner if SCRUM is used etc.). No not forget to address quality assurance procedures to be used throughout the product development process. Use subsections to logically divide content of this section.

## 5. Deliverables

List all deliverables (documents, software components, libraries, programs etc.) produced by this project. To column should contain the person/group the deliverable was handed to (customer, internal deliverable of, for example, library), Output should contain the name / short description of the deliverable (document, library, GUI component, interface etc.), Planned week no, Promised week no and their difference, ending with possible remarks that are defined in more details in the description table below. Note that “Milestones” and “Work products and deliverables” tables are not the same! There are many more items in this table, especially

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*regarding internal work products, used by other team members/subgroups, which are never delivered to project customer(s)!*

To	Output	Planned week	Promised week	Late +/-	Delivered week	Rem

#### 5.1.1 Remarks

Remark Id	Description

## 6. Inputs

*Fill the table with inputs (artifacts required to complete your project, but out of your control – for example library developed by another project, example data provided by the project customer etc.). During the project track whether the inputs have been delivered on time. Include inputs in risk table and try to develop preventive actions and strategies in case inputs are late or never delivered.*

From	Required item	Planned week	Promised week	Late +/-	Delivered week	Rem

Comment: *Required week* = week when it is required by the project; *Promised week* indicates when the *From* expects to deliver; *Late +* indicates a discrepancy between *Required week* and *Promised week*; *Received week* is week when it was actually received; *Rem* is a remark index number.

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#### 6.1.1 Remarks

Remark Id	Description

## 7. Project risks

There are several risks that can affect the productivity of the team members and the accuracy of the final result of this project. Therefore, it is essential to be analyze the possibility of each risk happening, and to come up with a preventive action for each risk early in the project. This will increase the possibility of producing a high quality product and dealing with problems easier. In the table below, risks are listed, along with their possibility and preventive actions.

Possibility	Risk	Preventive action
H	Poor communication with the customer	Try to insist on more frequent meetings with the customers.
H	Undefined date for receiving input data	Try to insist on receiving it as soon as possible.
H	Unclear requirements	Try to have as much contact with customer, and ask them for feedback. Get acceptance of requirements from the customer early in the project.
M	Communication within the team	Define precise roles of the team members (team manager, team leader) and define communication flow between all the sides of the team. Also, define fixed dates for group meetings.
L	Communication within the distributed groups	This will be solved by planning to have daily meetings and try to have sprints together.
L	Lack of technical background	We deal with this by choosing technologies that are widely used and well known to the team members
L	Cultural differences	Be patient and open-minded
L	Language misunderstandings	Be patient and ask a lot of questions, in order to not get a wrong understanding of what a person meant
M	Information flow – risk of now receiving all	Work on frequent communication especially between customer-project manager, project



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	information or of receiving correct one	manager-team leader
M	Losing data	Always have a back-up of all the files that have been created during the project
M	Integration problems	Good interface definitions

## 8. Communication

In this type of project when team members are physically separated, setting up communication protocols turns out to be a big deal. It is important to make it clear how the information will be shared among the team members and to make sure everyone has the same picture of the project.

In our team we have three separated groups of team members. We have four team members in Vasteras(SWE), two in Milan(ITA) and one in Zagreb(CRO). According to this we have agreed to have two subgroups. The first one consist of team members from Vasteras, and second one consist of members from Milano and Zagreb.

The subteam from Milano has a project manager and team from Vasteras has a team leader. Communication between these two people will be the most frequent, they will be in touch basically all the time and try to coordinate all team members and lead the project in the right direction. Having this frequent communication between these two people, we hope we will be able to react more quickly to any unexpected problem.

The next stage of communication within the group are group meetings. We agree to have at least one weekly meeting. More meetings during the week will be organized if needed. Each group meeting will be documented in the minutes of meeting document.

Finally, meetings within subgroups will be organized on a daily bases.

As technical support for communication, Skype, Google hangout and spreadsheets will be used. For sharing documentation and code Git will be used.

## 9. Configuration management

*Describe configuration mgmt. plan, coordination, tools used, backup, preventive actions and corrective actions when the system is not used properly by some team members.. Use subsections to logically divide content of this section.*

## 10. Project plan

### 10.1 Time schedule

Id	Milestone description	Responsible dept./initials	Finished week				Metr.	Rem.
			Plan	Forecast		Actual		
				Week	+/-			

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Comment: *Finished week: Plan* = original plan; *Actual* = week when it was actually available; *Forecast Week* indicates the estimated finished week; *Forecast +/-* indicates changes in the estimation compared to the previous project report; *Metr* is the difference between Plan and Actual, that is if Plan is w604 and Actual is w606, then Metr will be -2. To be filled in when the milestone is reported as completed; *Rem* is a remark index number.

### 10.1.1 Remarks

Remark Id	Description

## 10.2 Activity plan

*NOTE: the following description of the expected content is not fixed; in case of using different methodologies (for example SCRUM), the content of the section can accordingly be changed (for example, burndown charts, planned runs etc.).*

<<GANTT CHART(S)>>

*Insert a Gantt chart that depicts all activities defined in the table below, their dependencies etc. Gantt chart can be copied from PM software used for project management (MS Project, Redmine etc.). In the accompanying text, comment on the plan and identify critical path(s), measures to lower the risk for being late. Also, clearly define groups of activities –for example runs in SCRUM, iterations in iterative development etc.*

The table should contain activities in the project (will evolve over time). ID – ID of the activity, Predecessor – activity ID(s) this activity relies on to be finished, Activity – short name of activity, Days – expected duration of activity in days, Mdays – expected duration in man-days, Rem – remark id

ID	Predecessor	Activity	Days	Mdays	Rem.

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*Total planned calendar days for the project to be finished and total planned man-days required to finish the project*

Planned effort (days)	Planned effort (man-days)

#### 10.2.1 Remarks

Remark Id	Description