

# Monitor

## Laboratorio Tecnologias Informação

### Departamento de Engenharia Civil e Arquitectura

José Gonçalo Simões Rodrigues

#### Activities Report

**Abstract**—During this activity it was required of me to perform the full magnitude of the work demanded of a Monitor. This being maintaining the workspace in such a condition as to promote a good environment, by supplying the offered services, and coordinating with my co-workers for a more effective task accomplishment.

More exactly, by keeping the laboratories infrastructure and environment well maintained, in a fashion that the users could enjoy a productive and calm environment with all the necessary resources. This task is achieved by keeping the workspace under close observation, ensuring all the rules are applied to the users.

It also was of vital importance to maintain the services offered coherent and at peak quality, it is required to give a precise amount of information in a manner both pleasing and quick to the users, while most often realizing multiple tasks, such as offering printing services, offering qualified courses enrolment, selling other complementary items and generally helping the users.

These three factors are the focus point of the work of a monitor, and are reflected in the quality of the laboratory and current position as one of the Instituto Superior Técnico (IST) best academic facilities.

**Index Terms**—LTI - DECivil, Monitor, services, quality, coordination, skillset.

## 1 INTRODUCTION

THE Laboratório de Tecnologias e Informação (LTI) - Departamento de Engenharia Civil e Arquitectura (DECivil) is a laboratory with the mission of facilitating the technological and information resources required by the students of the Civil engineering, Architecture and Geo-resources (all these belonging to the DECivil) to accomplish their academic needs.

Bolstering 151 workstations, 60 of which are utilized in classrooms by Gabinete de Organização Pedagógica (GOP) for normal classes, with all the required software the students need. With dedicated space for

Laptop use, three printers and one plotting printer. With these resources the laboratory facilitates a great quantity of digital means.

While also offering other services printing, on various sized sheets, and other services like selling test sheets, binding services and qualified classes on specialized software use.

It is required of the monitor core to be in constant service of these services by both offering them and assuring they are well maintained.

When is the "Subject"?

### 1.1 Mission

LTI - DECivil's mission is to assure the availability of the means to realize the academic needs of the students of the Civil Engineering, Architecture and Material Departments of IST by offering services with a focus in technology.

- José Gonçalo Simões Rodrigues, nr. 70958,  
E-mail: jgoncalosrodrigues@tecnico.ulisboa.pt, Instituto Superior Técnico, Universidade de Lisboa.

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(1.0) Excelent (0.8) Very Good (0.6) Good (0.4) Fair (0.2) Weak	ACTIVITY					DOCUMENT						
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	1.2	0.5	2.0	0.8	4.5	0.25	0.25	0.15	0.25	0.4	0.5	1.8

## 1.2 Informatics Services

Of the 151 workstations, 84 are available to the students at the LTI - DECivil from 8am to 11pm in week days, these computer stations offer the necessary software as well as a secure connection to the Internet. It is part of the laboratory's mission to ensure that the software is up to date and ready to be utilized in any academic need the students might possess.

## 1.3 Printing Services

Offering specialized printing services with the average laboratory user in mind, the LTI - DECivil offers printing in sizes A4 and A3 with various types of paper, as well as bigger sizes like A0 for the plotting needs of the students, all of these formats are customizable in their configurations to assure the client's needs.

The printing services are also made available in a form that lets clients be able to leave a file to print, and later comeback to collect it.

## 1.4 Specialized Software Courses

The laboratory administration also makes available various courses to help all interested persons specialize in various software's, these courses are made available by a third party company, recognized by the EU and offer certificates of acknowledging the acquired skills if the student is successful in finishing the course. Examples of the offered courses are 3ds Max Design 2015, ArcGIS Fundamental, Advanced AutoCAD 2015, e SAP2000 v16.

# 2 MONITOR CORE

The group of students that maintain the LTI is denominated the Monitor Core, and is supervised by a professor from the DECivil, with all decisions being left for said professor's approval, but otherwise being left to be managed by the Monitor Core composed of 16 active members, and old monitors that may still help when they can.

## 2.1 Regular Duty of a Monitor

It is every monitor's responsibility to maintain the laboratory as best he can, with special attention to:

- **Assure the suitability of the environment presented at the lab**, such as maintaining a productive silent environment, that is well taken care of, and promotes an idea of academic work, by **assuring that the Laboratories rules are followed and if need be enforce them**.
- It is also of special importance to facilitate the **User/Monitor interaction**, be the user a client or a student that wishes to utilize the services offered by the laboratory. This focus in the interaction is key to promote the mission of the laboratory.
- **Teamwork** is perhaps the most important of the regular duties that must be exercised by the monitor core, both to assure the well-functioning of the laboratory's internal structure, but also to pass the above points from an ideal to reality.  
An example to describe how essential this skill is, can be seen in a busy work day of the laboratory, where hundreds of students will require the attention of the monitor core, in any given moment, the ability to coordinate and work effectively with teammates to ensure the users satisfied is more than a skill needed, it is a duty any given monitor must accomplish.

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## 2.2 Personal Availability

A monitor's work isn't limited to his allocated work time (of two weekly turns each of 3 hours), a monitor must also ensure that he is ready to complement the workforce if there is ever the need, as well as putting extra time in the job if his position so demands.

With the existing workforce composed entirely of students from IST, who have their personal academic needs, there will be the need from time to time for some member of the monitor core to do extra turns, this is a part of the job that is expected. Adding also to this responsibility there is also the fact that some of the monitors work is reliant on work from

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one position to the other, assuring a job well done both in and out of pre-allocated time is a requirement to guarantee no part of the laboratory ever grinds to a halt.

## 2.3 Internal Structure

Being entirely managed by the Monitor Core there needs to be a well-structured bureaucracy inside the LTI.

Every monitor is assigned an area of specialization, where aside from the standard work and responsibilities he is assigned he must also realize the accomplishment of said specialized tasks. These specializations also reflect the various departments among the core and are the following:

- **Presidential Duty**, every year a new council is elected among the monitor core, those assigned this duty will evaluate the needs of the laboratory and its users, and choose or approve actions to be executed by the remaining monitor departments that will later be approved by the super visioning professor assign to accompany the laboratory.
- **Technical Duty**, a monitor assigned to this duty will have to assure the well-functioning of the informatics side of the laboratory as well as develop future tools that will help to improve the existing work and user experience.
- **Courses Duty**, a monitor assigned to this duty will maintain and coordinate the existing courses made available in the laboratory.
- **Services and Spaces Duty**, a monitor assigned to this duty will focus specifically in the physical space and needs of the services that need to be addressed in order to maintain the well-functioning of the laboratory.
- **Resources Duty**, a monitor assigned to this duty will have to assure that there is no lack of physical resources in the laboratory, such as sheets, ribbons, and ink for the prints.
- **Human Resources**, a monitor assigned to this duty will have to supervise teamwork

and facilitate the acquisition of new monitors.

In addition to the Presidential Council, there is a monitor assigned to each one of these duties that will be responsible for said department.

## 2.4 Formant Monitor

Having entered recently, I was attributed the title of formant monitor, this title is granted from time to time, when the laboratory needs to arrange for new personal to enter the monitor core and replace those that for some reason or another will have to leave.

The title of formant monitor is essentially a monitor in training.

### 2.4.1 Duties

This role of monitor in training is bound to the same duties of a normal monitor, but will have the added need to satisfy a team of monitors (chosen at random) that the formant is capable of accomplishing the needs of the laboratory in such a fashion as to better improve its services and the standing environment of work that is encouraged.

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### 2.4.2 Evaluation

The method in which the formant monitor is evaluated is based on the average perceived teamwork capability, work effectiveness, and the rate at which tasks required of a monitor are accomplished.

This is realized during two phases of time marked by the realization of a theoretical test to measure the rate of assimilation and knowledge of the rules applied to the laboratory, whereby at the end of each phase, a formant monitor might or might not pass to the next phase of evaluation.

During each phase the formant will also receive constant feedback, offered at the end of each working turn, as to allow for improvement.

### 2.4.3 Integration into the Monitor Core

If the evaluation is passed then the individual is granted full status as a Monitor working for the LTI - DECivil.

### 3 CONCLUSION

Overall the work of a monitor is a task that not most people can accomplish in a manner that will improve the LTI, the requirement of social skills, availability, and the amount of work that an individual will face on the job, adding the need to establish a good lasting impression of all the internal and external components of the LTI - DECivil can be a truly daunting task.

But said task is a good example of the real working world, where people are required to show both their technical skills and an ability to work with others in fashions not possible to learn besides real practice, such as interacting with co-workers and clients. The necessity to coordinate both time and physical resources to better achieve a goal, and the ability to understand that a small action such as delaying a task, or facilitating a colleague can have a huge reprisal in a working environment.

It is without a doubt that this activity demonstrates the soft skills required in any career, with the real pressure of sustaining an ideal for a working environment, not only academic but very real and tangible.

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**Gonçalo Rodrigues** is a student at IST attending a Master and bachelors degree of Computer Science and Engineering, specializing in the area of Distributed Systems and minoring in the area of Embedded Systems, who currently works as a System Administrator (Technical Monitor) at the LTI - DECivil.

*This Report describes essentially the role of LTI.*

*The specific activities the student performed are only described, very briefly in section 2.4*

**APPENDIX****STATEMENTS OF EXECUTION**

It was agreed upon with the class responsible on January the First of 2015 (01/01/2015), that the statement of execution will be delivered as soon as the LTI - DECivil makes it available.