Abstract

The project described in this document is a collaboration in the context of concluding my MSc in Mechanical Engineering, specialization in Production Management, by FEUP (Faculty of Engineering of the University of Porto).

The basis for my involvement in this project starts with my desire to put the knowledge acquired during my course at FEUP into practice for the development of humanitarian projects.

This project focuses on the optimization of the World Food Programme’s Supply Chain. WFP is a United Nations agency, with Head Quarters based in Rome. I was involved in the project as a intern of the Logistics Development Unit (LDU) – part of the Logistics Division – for a period of four months.

The study is a practical answer to a challenge within the Humanitarian sector and illustrates how an Engineer can add value to the context of this sector. Being an engineer, you need to be able to balance science and practice, and by doing this adding value to processes and/or services.

WFP is currently dealing with perhaps one of the biggest challenges so far: The UN reform. The UN reform results in a new “market” for WFP – providing logistics services to other humanitarian actors. In combination with increasing prices for food and fuel and the increase of natural catastrophes, WFP has challenging times ahead.

However, WFP has the strength, the will and the capacity to answer to this challenge. During this study, I met people that are involved beyond their technical knowledge; people that are genuinely concerned about and committed to what they are doing. People who at the end of the day think: “the work that I did today ads value/helps the people that we have to feed – the beneficiaries”. This attitude, combined with technical capacity and a strong team spirit are the formula to achieve the target.

The LDU, as a team, is focused on this change. The unit is responsible for triggering and supporting a new organizational culture (thinking and acting), characterized by professionalism and team spirit. The Supply Chain Optimization Project (SCOP) is part of this change process. Improving the Supply Chain means improving WFP. “We

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1 Temmy Tanubrata in a comment about the personal work
Deliver” is WFP Logistics’ slogan and the quality of the delivery influences the image of the organization.

This study presents the first steps in a new improvement phase in WFP’s Supply Chain. Within the scope of my involvement in the project, the basis to start a new approach was set, a model for performance measurement was defined based on correct data instead of on assumptions and an analysis to find the real roots-causes of the problems was initiated. Beyond that, a selection of new ideas was presented. Some of these ideas were in the meantime approved and a start was made.

The present study focused on the upstream processes for international cash purchases and distribution.