

Portworker Development Programme in Bulk Terminals

Background

The Portworker Development Programme (PDP) is a project of the International Labour Office (ILO) of the United Nations Organization. Its underlying mission is to provide centrally prepared training materials for use by the industry.

It is also one of the ILO's long-term global strategic goals to ensure the safety, health, welfare and vocational training of port workers and to assist countries in establishing and/or improving their port training capability. In 1989, with the support from the Government of the Netherlands, the ILO developed 30 units of instruction (representing over 1,000 hours of instructional materials) focusing mainly on the handling and supervision of container terminal operations in ports (hereafter referred to as "PDP I").

The Portworker Development Programme in Bulk Terminals (hereafter referred to as "PDP II"), was initiated by the ILO with the support of the Government of the Republic of Korea. Work on the development of the project began in 2014. This built upon the experiences of PDP I to cover the training of port workers working with bulk cargoes. Dry bulk terminal operations are inherently dangerous for port workers unless safe systems of work are rigorously employed both on-board ship and in the terminal. 70% of port workers engaged in handling dry bulk cargoes belong to job categories considered by terminal operators as unskilled - training is often not perceived as a priority, yet port workers are exposed to extremely challenging and hazardous conditions. Improving the skills, knowledge and attitude of port workers will improve their motivation and help bring about improvements in safety, environmental controls, performance and their status.

The Objectives

The main objective of PDP II is to enable governments and port authorities of developing countries to establish effective and systematic port worker training schemes, which are designed to improve cargo-handling performance, working conditions and practices, safety, status and welfare of the port workers working with bulk commodities.

The training materials will target the port workers working in bulk terminals dealing with major dry bulk cargoes, including iron ore, coal, and bulk fertilizer. The main focus of the PDP II will be on occupational safety and health, and environment issues. Priority will be given to areas where lack of training is putting great risk on the safety of terminal and contractor employees, damaging expensive and sophisticated handling equipment, and compromising the safety of the vessels and their crews.

The Philosophy

The training materials were developed as an open-ended series of self-contained but interrelated 'Units' of instructions and designed for classroom-based, instructor-led but highly interactive teaching of small groups of learners. The classroom sessions are fully supported by practical group work and worksheet, and by organized terminal and ship visits. It is not intended that the Units should comprise a 'course' in the conventional sense, but that instructors should select and combine groups of individual Units (and possibly Sections of Units) to form

appropriate training schemes for groups of employees (or individuals) according to their training needs and what their employers dictate.

Unit materials

The Unit materials are based on the best international practice; this is ensured by the employment of acknowledged subject experts in the project team developing the materials, and by grounding the PDP approach on the ILO's regulations and guidelines on health, safety and welfare of port workers. Throughout the Programme, the underlying mission is to provide not just a series of 'how to do it' checklists but also simple explanations and descriptions of the reasons for processes, procedures and practices — the 'why do it'. The aim of the Programme is to create the required motivation to adopt best practices through understanding, so that port workers acquire a positive attainment of knowledge, skills and attitude to their work, with benefits to organizational efficiency and personal safety.

There are eight (8) Units as follows:

- Unit D1.1: Dry Bulk Terminal Operations;
- Unit D1.2: Transport, Handling and Storage of Iron Ore;
- Unit D1.3: Transport, Handling and Storage of Coal;
- Unit D1.4: Transport, Handling and Storage of Bulk Fertilizer;
- Unit D4.1: Safe Working in Dry Bulk Terminals;
- Unit D4.2: Safe Working on Dry Bulk Ships;
- Unit D5.1: Operations of Quayside Gantry Cranes and Equipment; and,
- Unit S1.5: Supervision of Dry Bulk Operations.

Each Unit is designed and developed to be taught independently and therefore maintains its integrity in the content coverage. There are therefore invariable duplications between the Units that require the instructors to make adjustment based on the training need analysis of their class.

The PDP Units are presented in both hard copy and in electronic format in the following manner:

- a. Instructor's Lesson Plan for each Unit comprising:
 1. Table of Content.
 2. Training Management Plan.
 3. Lesson Plan.
 4. Worksheets.
 5. Test.
 6. Marking scheme to Worksheet and Test.
 7. List of Handouts.
 8. List of Video.
 9. Instructor's Feedback Questionnaire.
 10. Trainee's Feedback Questionnaire.
- b. PowerPoint Format Slides for each Unit.
- c. Trainee Reference Manual for each Unit.

d. Handouts for each Unit.

e. Electronic Library. The E-library will include all the above and relevant videos and handouts for the respective Units. All Word and PowerPoint documents will also be saved in the PDF format as the master reference, in case the Instructors make amendments to the training materials and lose the original version.

Each set of Unit materials is designed to be as complete and self-contained as possible with almost everything that the instructor might need and included in the manual. The lesson plan provides opportunity for the instructor to use local terminal materials and examples to effectively contextualize the training to the trainees' situation. The use of actual examples of materials collected from the trainees' terminal, and illustrations supplemented as photographs and/or video recordings of local equivalents will add considerably to trainees' understanding. Also, it will increase the motivation of the trainees to acquire new knowledge, skills and attitude.