Identification of qualifications for train-dispatcher trainees

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Abstract

A train dispatcher supervises and controls the traffic on the railway lines. The job is varied and complex, and errors made by the dispatcher may have severe consequences for humans, equipment, and the environment. The Norwegian National Rail Administration initiated a study to improve the basis for selection of train-dispatcher trainees. The purpose of the first part of this study was to uncover the skills of train dispatchers, and from these to deduce the requirements, which train-dispatcher trainees should fulfil. The paper introduces the methods applied to uncover the dispatcher skills; a review of existing task documentation, interviews with experienced dispatchers to determine the dispatcher qualities seen as most and least desirable, and a hierarchical task analysis. The dispatcher skills identified, and the key requirements to train-dispatcher trainees, are outlined, and a possible approach for prioritising the trainee requirements, is discussed.

Introduction

The overall goal of a train dispatcher is to manage the traffic on the railway lines. In Norway, most dispatchers are located in one of the country's eight remote operation control centres, where each dispatcher typically manages the traffic on several kilometres of railway lines. The number of dispatchers at the centres varies between two and fifteen, with reduced staff during the nights. A special type of dispatchers is situated at local railway stations where they manage the traffic within the area of the particular station. All dispatchers have at their disposal means for monitoring the train traffic, for controlling the signals and points, and for communicating.

The Norwegian National Rail Administration (NNRA) initiated a study to improve the basis for selection of train-dispatcher trainees. Personnel selection aims at predicting the future competence of a potential trainee, and is performed with reference to a predictive model (Algera & Greuter, 1993), which contains *items*, e.g., abilities and attitudes, that are considered to be important in the particular job (Schuler, 1993). A personnel selection process takes the operational environment, as it's starting point. It assumes that the operational environment is designed to