

Collaborative Decision Making (CDM) – a pilot study exploring participation and empowerment before implementing new technology and work procedures

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Abstract

The pressure on European air-traffic logistics increases, both at the airports and in the sky, as the passenger rate increases. Handling airborne aircraft is becoming more rationalized as an effect of sophisticated technology and lower separation-minima. Technological and legal development at airports is lagging behind causing delays. Airport operations might be more efficient by increasing accurate flight-related information to the ground handlers serving the aircraft and the passengers during the turn-round processes. Increased collaboration between airport actors may stimulate optimal decision making with regard to the aircraft turn-round processes. Several change projects at European airports focus on increased airport efficiency gathered under a EUROCONTROL initiative. The concept being implemented, called Collaborative Decision Making (CDM), consists of new information-carrying technology and work procedures. The social and psychological aspects of implementing the CDM concept were studied during the pre-implementation phases at a European airport. The purpose was to exploratorily analyse the involved employees' participation and empowerment preceding the implementation, and how that affected the employees' attitudes and emotions toward CDM. Fourteen respondents from five airport organisations were interviewed. The results showed low level of participation and empowerment, affecting attitudes and emotions negatively towards the planning, preparation, and development phases preceding the CDM implementation. Attitudes and emotions toward the CDM concept were not affected.

Introduction

During the last decades an increasing number of people travel by air. Even with bigger and faster aircraft this has led to delayed flights partially due to fragmented airport information flows, lack of accurate information, limited global situational awareness, insufficient terminal and gate structure, long turn-round times, and low predictability of operations at airports.

In D. de Waard, K.A. Brookhuis, and A. Toffetti (Eds.) (2006), *Developments in Human Factors in Transportation, Design, and Evaluation* (pp. 237 - 248). Maastricht, the Netherlands: Shaker Publishing.