

Oil Spill Response Simulator Training – Realistic Enough to Improve Response Capability? Lessons Learnt from Pilot Courses

E. Rantavuo¹, H. Malinen², J. Halonen¹, A. Lanki¹, J. Punnonen³ & S. Norema⁴

¹ *South-Eastern Finland University of Applied Sciences Xamk, Kotka, Finland*

² *Finnish Environment Institute SYKE, Helsinki, Finland*

³ *South Karelia Fire and Rescue Service, Lappeenranta, Finland*

⁴ *Kymenlaakso Fire and Rescue Service, Kotka, Finland*

ABSTRACT: Finland has not confronted a major marine oil spill since the 80s. Thus, most of the current responders have no first-hand experience in conducting actual response operations. The risk of a large-scale oil spill incident is relatively high and the special characteristics of the Baltic Sea and the Lake Saimaa necessitate high response capability. Yet, it is difficult to prepare for a response situation, if you have no applicable previous experience. Full-scale equipment deployment exercises are considered effective, but laborious and costly, thus a very frequent training interval cannot be maintained. Could simulator training be used to gain adequate response routine? Are simulator exercises realistic enough? The main objectives of the oil spill response exercises are to test the response plans and improve the ability of the responders. How to create simulator training scenarios that do not simplify the phenomenon, or build upon assumptions, allowing the true identification of possible knowledge gaps? It should also be studied, whether operational limitations of the equipment can be revealed through simulator training and how the efficiency of training can be measured and the improvement of skills verified. This paper describes two of the training practices the Finnish oil spill response authorities apply. BORIS-situational awareness system training has proven its benefits in adding realism to the response planning and the new SCAROIL simulator training method goes even further. The simulator training methods' ability to measure up with the above-mentioned challenges is tested via two pilot courses. The results are discussed in this paper.

Category: Effective Preparedness

Type: Technical conference presentation

Presenters: Emmi Rantavuo and Henna Malinen