Maritime Emergency Management Capabilities in the Arctic
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ABSTRACT
Growing commercial activities in the High North increase the possibility of unwanted incidents. The vulnerability related to human safety and environment as well as a challenging context, call for a strengthening of the maritime preparedness system, cross-border and cross-institutional collaboration. In this paper, we look into the different stressors and risk factors of the sea regions in the High North. We elaborate on emergencies where integrated operations like mass evacuation is needed. We build upon in-depth studies of two cruise ship incidents close to the Spitsbergen Islands, and full-scale exercises in the Arctic region. We claim that coordination of such operations where several institutions and management levels are included demands significant integration and communication efforts. Implications for the training of key personnel responsible for coordinating such operations are discussed.

KEY WORDS: Maritime preparedness system; integrated emergency operations; High North; cross-border cooperation; competence and training.

INTRODUCTION
Emergency situations are often characterized by lack of overview and uncertainty about cause, consequences and suitable safety barriers. In areas like the High North, due to limited infrastructure and the scarcity of emergency capacities, a simple emergency situation can quickly turn into a crisis involving significant risk for people, nature and vulnerable societies. The turbulent weather conditions facing emergency actors, makes rescue and relief operations a challenging and time consuming task. In this paper, we examine how the emergency management has to be configured to overcome challenges related to large-scale emergencies with limited local infrastructure, long distances and harsh weather conditions in icy waters. In addition, we consider the limited availability of emergency support systems and the time delays caused by the geographical distances.

By examining the various emergency situations we reflect on suitable composition of the infrastructure, emergency groupings, and coordination mechanism.

THEORY
Emergency Management and Emergency Response Pattern
High levels of uncertainty combined with a need for fast and reliable action are the main characteristic of emergencies (Kyng, Nielsen, and Kristensen 2006). Major incidents like shootouts and terror action, or cruise ship groundings with mass rescue operations (MRO) are categorized by lack of sufficient resources to meet the emergency situation. These situations are often chaotic and stressful with a large number of causalities, and a mix of SAR capacities. Thus, obtaining and maintaining an overview for such an incident become extremely hard for the coordinators and the different levels of command.

According to Borch and Andreassen (2015), emergency management is regarded as a tightly knit interplay between different management levels from the strategic level and operational headquarters down to the on-scene coordinator and incident commander. This calls for attention on roles and capabilities at all decision levels and the horizontal and vertical interaction patterns. Uncertainties and conflicts over the roles between the levels might influence negatively on managers’ performance. In extreme environment, a huge number of aspects towards a broader range of stakeholders has to be taken into consideration (Mintzberg, 2009). Not the least, the next in kin and media pressure will be extremely high and will demand extra focus and more roles to fill.

A managerial role can be defined as a set of actions and responsibilities. Mintzberg (1973) suggested that the managerial roles within an organization can be categorized into three key categories: interpersonal, decisional and informational.