Funded by the European Union

secureu
DIGITAL EDUCATION TOOLS FOR SECURITY RISK MANAGEMENT

LEARNING FROM EXPERIENCES OF THE NORTHGUIDER GROUNDING

Natalia Andreassen / Rune Elvegård / Nord University /2024

ABSTRACT

This article presents a case of learning from experiences of the Northguider accident and implementing improvements in the emergency preparedness systems. The article starts with the description of the grounding and crisis management operation, and then proceeds with presenting the case of emergency preparedness exercise that was based on the scenario of this incident.
In relation to the ISO 31000, the Improvement principle is mentioned, and development of emergency preparedness exercises is suggested as efforts for continually learning and improvement.

Link to ISO 31000

The ISO 31000 standard specifies the guidelines that provide a statement of risk management principles. ISO 31000 is an important and useful tool for security risk professionals to develop risk management strategies, however, they need to extract and integrate the guidance which is most relevant for their organizations and improve performance according to their experience.

The last principle in ISO 31000 is Improvement, which includes value of risk management, adapting the framework and integration of risk management activities. This principle confirms that the risk management arrangements should ensure continual improvement. Risk management is continually improved through learning and experience.

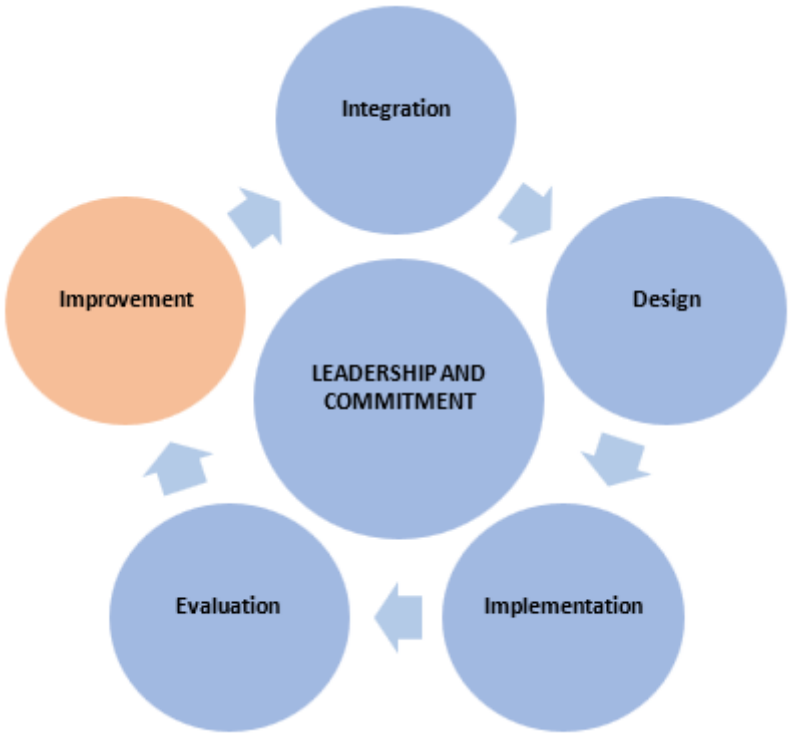

Figure 1. Risk management principles by ISO 31000

1. Introduction

The article describes the case of the Northguider grounding, which was a very complex search and rescue and marine environmental response operation. The scenario was later utilized in emergency preparedness exercises for improvements of the risk and crisis management systems in the Arctic. One such exercises is presented in this case study, as the best practice to learn from experiences of own emergencies and from others.

2. Case

During Christmas season, December 28, 2018, the Norwegian trawler Northguider was fishing for shrimps in the Svalbard archipelago with a crew on 14 persons. At approx. 13:00 it grounded in the narrow northern part of the Hinlopen Strait. There were no other ships in in the area. Northguider sent out a mayday via emergency beacon and MF/HF radio. Northguider did not receive any response to the distress signal, but the message was intercepted by the Norwegian Coastguard Vessel "Barentshav", which was located near the island Bjørnøya. The Barentshav sailed towards Hinlopen but had to turn back due to ice conditions.

After a few hours, the entire crew was rescued by 2 helicopters from the Governor of Svalbard after a very tough rescue operation in bad weather. Lifting in Arctic conditions is a challenge itself, but this operation was at the limit of what is possible in -20 degrees Celsius, darkness and strong winds.

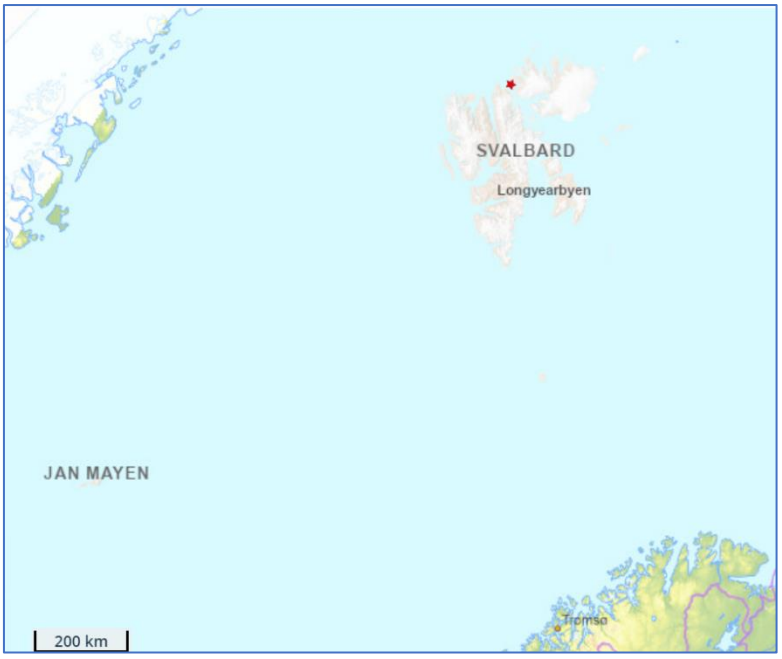

Figure 1. Location of the Northguider grounding

After the SAR operation was completed, the Norwegian Coastal Administration took over the responsibility for the response. Due to ice conditions, it was decided that the Norwegian Coastguard vessel Svalbard could assess the situation for further work. The ship had ice class and was able to handle

multi-year ice. On the 9th of January 2019 they started emergency unloading of the bunker fuel to reduce the enormous environmental consequences in case the trawler starts leaking.

In February 2019, Northguider was emptied of all fuel and environmentally hazardous substances. From August to October 2019, a contracted professional salvor did an attempt to raise and tow the ship without success. Because of the ice situation, the harsh climate and remote position, the salvor had to postpone the salvage operation to the summer season 2020. Only by September 2020, the ship was scrapped on the spot and removed.

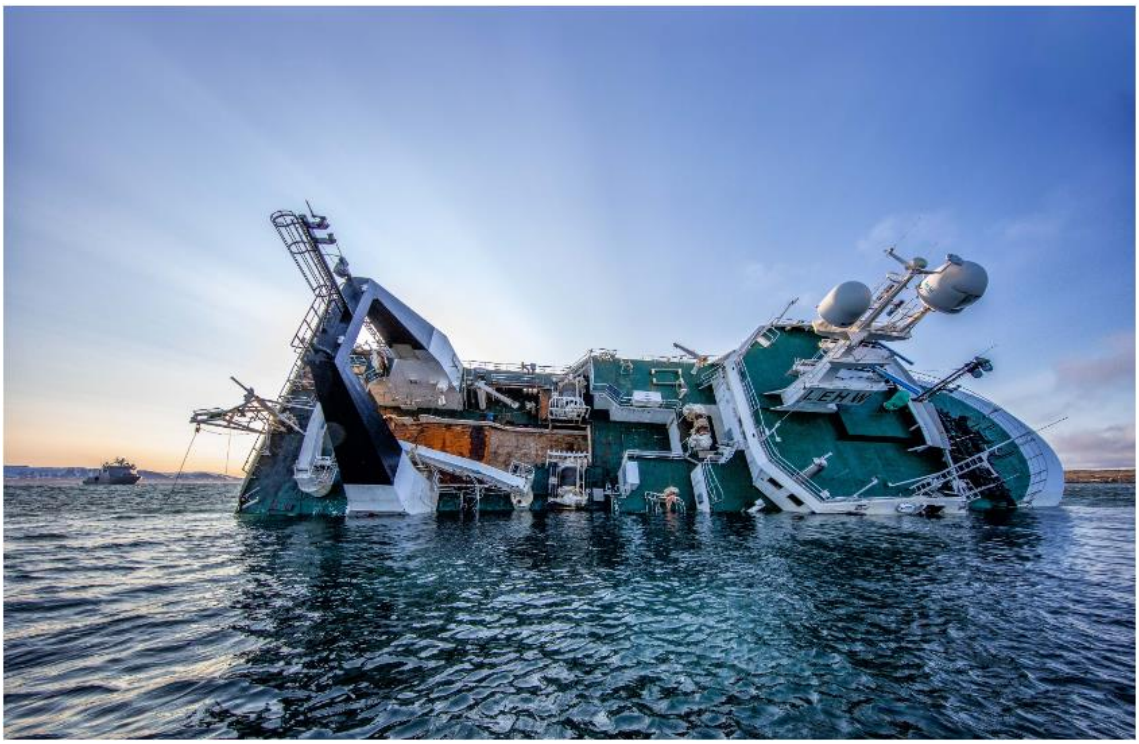

Figure 2. Northguider, photo: Håkon Kjøllmoen

Emergency response management operations often involve a wide range of actors with specialized tasks and roles related to information sharing, decision-making, and front-end personal command (Bigley & Roberts, 2001). The on-scene command of response operations relies on managers and the systems that are behind, such as procedures, protocols, formal structures etc. In volatile and complex environments, coordination is less dependent on the pre-planned design than on the current skills, solving emerging tasks and challenges. The case showed that it is important to pre-plan the roles and responsibilities for both SAR and marine environmental response incidents. This ensures that the key contacts of local, regional, and national authorities collaborate well at the time of the incident. Beside the initial assessment is vital, the necessary measures must be taken already during the SAR phase.

In November 2021, the table-top exercise “Oil in Ice” took place under the auspices of ARCSAR, the Arctic and North Atlantic Security and Emergency Preparedness Network, which was a large EU-funded innovation project. The exercise was facilitated by Nord University’s NORDLAB, the emergency preparedness management laboratory (ARCSAR, 2022). The main purpose of the Oil in Ice 2021 tabletop exercise was to discuss how oil spill preparedness and response is organized in the case of a large-scale operation in the Svalbard region, as well as to identify lessons from other locations and agencies in the Arctic and North Atlantic regions.

Figure 3. ARCSAR exercise Oil in Ice, photo: Center for Crisis Management and Collaboration

The scenario for this exercise was based on the Northguider grounding case but imagined that the spill happened. The situation in the Svalbard area is quite challenging, as there are multiple actors from the SAR and marine environmental response sectors who need to collaborate to handle the incident. This includes marine environmental response, the rescue operation, and securing the vessel and the environment.

To learn and discuss possible needed improvements the training audience was divided into three groups: the main training audience – those who would be involved in case there were oil spill; the secondary training audience – the similar organizations in other Arctic countries, and observers – all other relevant or interested stakeholders. The exercise contributed to deeper understanding of the needs for skills, assessment systems and competences to deal with Arctic marine environmental incidents.

3. Best practices

There is a written joint handover procedure between JRCC and NCA in Norway. However, it is important to understand how to use the procedure and continually improve the systems. This exercise was an important contribution to sharing knowledge and experience on how a serious incident and subsequent oil pollution can be handled under extreme circumstances in the Arctic (Kystverket, 2021). This exercise contributed to the improvements, understanding of relevant procedures, and assessment of new competences needed to deal with Arctic incidents.

The scenario was based on the real case, so the realism during tabletop- and game exercise provided valuable opportunities for demonstrating relevance of the challenge to various groups of stakeholders. Advanced tabletop exercises like this require good pedagogical planning with a focus on different backgrounds and needs of the various participants. The most important is to facilitate the

learning of each involved individual and organization and exchange ideas on how to deal with a complex event in demanding conditions (Elvegård & Andreassen, 2022).

As the ISO 31000 suggests, crisis or risk management is continually improved through learning and experience. Emergency preparedness exercises serve as a particularly effective learning method. They contribute to enhancing security risk management capabilities. By creating conversational spaces, team members can reflect on their collective experiences and discuss potential response actions. For more recommendations for the development of study and training programmes, in particular, on various exercise methods, see Chapter 5 of the SECUREU project report "Recommendations for higher education institutions teaching security risk management."

References

ARCSAR (2022) Tabletop Exercise. ARCSAR TTX 2021 "OIL IN ICE". Exercise Report. WP3 T3.2, https://arcsar.eu/wpcontent/uploads/2018/11/ARCSAR-TTX-2021-OIL-IN-ICE.pdf

Bigley, G. A., & Roberts, K. H. (2001). The incident command system: High reliability organizing for complex and volatile task environments. Academy of Management Journal, 44(6), 1281–1299.

Elvegård, R. & Andreassen N. (2022). Internasjonalt samarbeid med fokus på oljevern i Arktis, High North News, https://www.highnorthnews.com/nb/internasjonalt-samarbeid-med-fokus-pa-oljevern-i-arktis?fbclid=IwAR020Lb75C6x9q6yfRzRuw7u4JrLZCveQPU2BqB9_4De37Lmp5kTTkixUl0

ISO 31000:2018 Risk management — Guidelines (Edition 2, 2018)

Kystverket [Norwegian Coastal Administration] (2021) Ledet og deltok på øvelse med fokus på nordområdene, Kystverkets Nyhetsarkiv 11.1.2021, https://kystverket.no/nyheter/2020/ledet-og-deltok-pa-ovelse-med-fokus-pa-nordomradene2/

Secure (2024) Recommendations for higher education institutions teaching security risk management, Erasmus plus project deliverable.