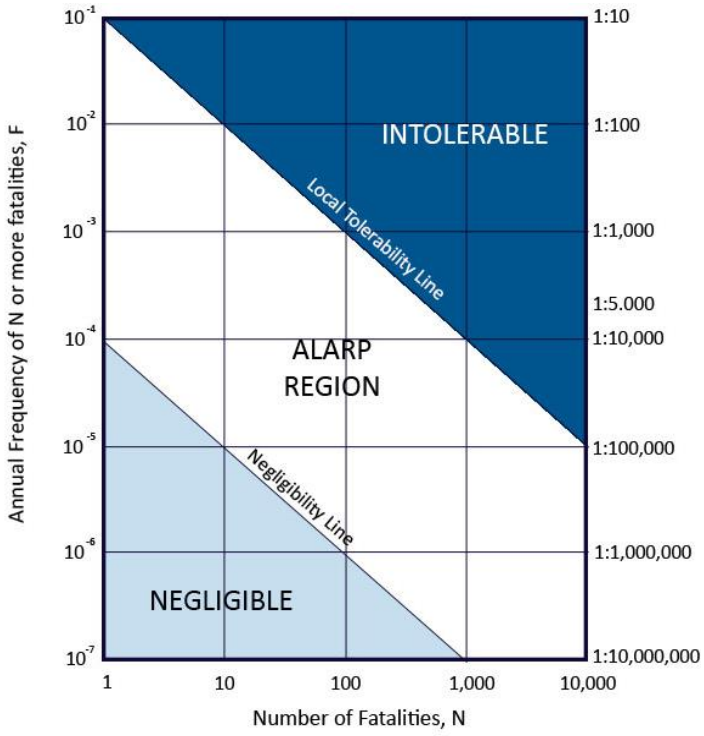
Method	ALARP (in cooperation with the OpenRisk Project)

Description

The ALARP (As Low as Reasonably Practicable) principle is based on the fundamental thinking of ‘acceptable’ or ‘tolerable’ risks. It allows analysts and decision makers to define boundaries to combine probability-consequence scales. These boundaries can be used to delineate acceptable and intolerable risks. This allows decision makers to evaluate whether a system or process poses certain risks which need to be treated using risk-control options. The ALARP principle can easily be combined with tools such as Risk Matrices to graphically represent the boundaries of risk tolerability.

Example of ALARP:



Basic procedure

1. gather stakeholder views on the tolerability limits of risks
2. apply the ALARP limits
3. choose an appropriate diagram to capture the different probability and consequence values

Prerequisites/Aids
Values for the probability of occurrence and the severity values using methods such as the risk matrix

Effort
The process requires few resources, but some experience with the methods is needed to properly implement and apply the principle to support decision making.

Advantages	Disadvantages
• It provides a common understanding of the intolerable risks associated with a system or process; • It can allow decision makers to use limited resources in a systematic and reasoned manner, both financially and in terms of risk; • It can be used to visualize and evaluate the impact of risk treatment options for a diverse range of activities, systems and processes.	• It is easy for internal and external biases to be present in defining ALARP, if the stakeholder consultations are not done properly; • It requires decision makers to place and evaluate monetary values on highly sensitive issues, such as human lives or environmental damages; • Its output may be equally understood, but not equally accepted by different stakeholders.

Related Literature
IMO (2010): Manual on oil spill risk evaluation and assessment of response preparedness. International Maritime Organisation, London, UK IMO (2013): Revised guidelines for formal safety assessment (FSA) for use in the IMO rule-making process. International Maritime Organization, London, UK. MSC-MEPC.2/Circ.12. OpenRisk Guideline (2018): Regional Risk Management to Improve European Pollution Preparedness and Response at Sea