

[Maritime Safety & Security I]

Data Repository and Accident Analysis; What Experts Need to Know

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PURPOSE: The main aim of the SAFEMODE project is to develop a novel Human Risk Informed Design framework. SAFEMODE adopts a cross-industry approach to capture and analyse safety events for maritime and aviation. Among other activities, SAFEMODE develops a digital data repository system based on analysis of incident and accident reports. These data, however, have to be categorised under a uniform scheme of categorisation, 'Taxonomy'. The final digitalised system and categorisation are aimed to facilitate the experts and researchers in the maritime and aviation sector. The present task is oriented to understand the needs of maritime experts and to capture their expertise and knowledge for a more suitable digital data repository system.

METHOD: Selected experts in the field of maritime domain worldwide have been invited for an interview in order to give their opinion on the repository and the taxonomy. The experts who participated in the interviews were recruited from different professional maritime backgrounds, such as safety engineering, Human Factors, seafaring and research in maritime safety, with a range of years of experience. The interviews were conducted online, based on a mixture of open and closed questions.

FINDINGS: Suggestions on how to use the data, what the experts need to search in a digital repository of past accidents, as well as suggestions on the output of statistics will be presented. Insights for preventive actions based on statistics and the necessity of near miss data will also be explained.

CONCLUSION: Despite modern approaches to safety in maritime practice, accidents still occur. Many argue that learning from past accidents is among the best practices for ensuring safety; however, understanding these data may vary based on conflicts between common understanding and different taxonomy systems. Maritime experts all agree that capturing accident data properly, especially near miss data, is the key for ensuring safety proactively.

Keywords: Accident Repository, Taxonomy, Human Factors

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