

Scaling the safe disposal of Conventional Munitions: From Optimisation to Transformation

Panel discussion

Dr. Bastian Niemeyer

Gesellschaft zur Entsorgung von chemischen Kampfstoffen und Rüstungsaltslasten (GEKA mbH)

Humboldtstraße 110, 29633 Munster, Germany

Bastian.niemeyer@geka-munster.de

Abstract

Large quantities of abandoned conventional munitions are to be found all over Germany and several other countries worldwide. Also, millions of tons are disposed in marine environments and cause long-term risks to safety, infrastructure, and ecosystems.

GEKA mbH, based in Munster / Germany, with its decades of experience in disposal and handling of explosives, munition and other reactive or energetic materials, fulfill its role in future disposal and technological development for a safer and cleaner environment, day by day.

A central focus is set on work safety for the personnel and how to reduce risks arising by everyday handling of dangerous good. But, while existing processes can be optimised to a certain value by existing procedures alone, it needs also some technical improvements. This also applies to the need of transport and a need of increasing number of disposal facilities and specialised equipment, but this does not solve the issue fully. Thus, scaling might by a chance of sustainability.

Generally, sustainable scaling cannot be achieved through incremental improvements alone. Instead, new technological approaches are required. By addressing questions like: “How can national disposal capacities be increased?”, we encourage ourselves, science and engineering companies to develop strategic answers and devices.

Together with research institutions like the Fraunhofer, we carried out several projects to focus on topics like remote detection and identification, reduction of manual handling, improve sewing and cutting of munition as well as integration and preservation of data and experience for future work and generations.

Our contribution in this conference aims to provide an insight to our framework of specialised disposal, our objectives and to enable cooperation with research and development companies for next-generation engineering solutions.