



NORWEGIAN DEFENCE
MATERIEL AGENCY

Updates in AASTP-4

Risk Analysis for Ammunition Storage and Transport

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Content

- **Overview**
- **Background**
- **Aims**
- **Updates to the current version**
- **Future Work**



Overview

- STANAG 4442 – Application of Risk Analysis to the Storage and Transport of Military Ammunition and Explosives
 - AASTP-4 – Manual on Explosives Safety Risk Analysis – Volume I
- STANAG 4802 – Application of Risk Analysis to the Storage and Transport of Military Ammunition and Explosives Edition B, Version 1
 - AASTP-4 – Manual on Explosives Safety Risk Analysis, Volume II



Background

- The idea of a Risk based manual started early in the late 90's.
- During the 90's discussion around different effect models often came up in NATO meetings.
 - Causing a need to gather and make NATO agreed methods.
- Several nations contributed to the work that started around 2004
- AASTP-4 was first published in November 2008, and the next in September 2016
- The latest edition was ratified in November 2014.



Background

- The document deals with the handling and storage of ammunition and explosives, and how to develop policies, methods, and regulations to ensure safety. There are two methods for managing this: Quantity Distance (Q-D) and risk-based methods.
- AASTP-4 are divided in two parts.
 - Volume I describes how to build a risk-based framework
 - Volume II contains methods and models for use in risk analysis.



AASTP-4 aims to:

- Promote the use of risk-based methods
- Provide guidance on establishing risk-based decision-making methods
- Describe existing risk-based methods used by participating nations
- Identify common features of risk-based approaches -
Interoperability



Updates in the current version

- The document was updated to the new format from AAP-03
- All the national methods was moved into different Annexes
- Some of the methods was updated
 - Description on explosion effects on different hazard divisions
 - IM
 - HD 1.3
 - Likelihood of event in operational storage
 - Exposure modelling
 - Risk aggregation and uncertainty



Future work

- Make national methods an SRD
- NATO agreed models for HD 1.3 in particular, but also overall



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WE EQUIP THE NORWEGIAN ARMED FORCES

WITH RELEVANT AND TIMELY EQUIPMENT



Abstract

The new version of AASTP-4 was sent out for ratification in 2024 and is now effective as STANAG 4802 and STANAG 4442.

The most visible change in the new version is the separation of the national methodologies into annexes and the agreed NATO methods into the main chapter. The chapters in the main text have also been updated and the presentation will describe the improvements made to the book.

Still there are more improvements to be made. The next step in the process is sketched out.