NORDAC
Nordic Armaments Co-operation
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Branchchief, Material Branch
Air Materiel Command
Chairman for Joint Nordic Collaboration Group on Environment and Hazardous Materials
Purpose

- Financial advantages
- Technology advantages
- Industrial advantages
- Networking
  - Information sharing
  - Lessons Learned

NORDAC synergy
### NORDAC architecture

<table>
<thead>
<tr>
<th>Levels</th>
<th>NORDAC organisations</th>
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<tbody>
<tr>
<td>MOD</td>
<td>=&gt; Leading Group</td>
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<tr>
<td>CHOD</td>
<td>=&gt; Coordination Group</td>
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<tr>
<td>Executing</td>
<td>=&gt; Cooperation Groups</td>
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<td>Investigation Groups</td>
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<td>Investigation Groups</td>
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<td><strong>Total</strong></td>
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The NORDAC Groups

Project Groups
Advanced Mortar System, AMOS
Nordic Standard Helicopter Project, (NSHP)
VIKING Submarine System Hearing Protector with Communication Equipment, (HCOM)
Forward Observer System
40 mm Automatic Grenade Launcher System (AGL)
Exchanger of Loads for All-Terrain Carrier 206
Naval – Vessel – Engines (MTU)
Torpedo/Mine/Sensor (TMS)
Sea Surveillance System

Investigation Groups
Armoured NBC reconnaissance vehicle
Small Arms Ammunition
Air Base Equipment
Fire Support
Naval AA-guns
Explosive Ordnance - Disposal - Information - System (EOD IS)
Naval Mine Clearance II
120 mm ammunition for LEOPARD 2

Cooperation Groups
Artillery Hunting Locating Radar (ARTHUR)
Protected Earth Moving Machines
Silent Water Jet Propulsion
RBS 15
RBS 17 Hellfire
Environment and Hazardous Materials
Soldier 2010
All-terrain carrier 206
Nordic SHARE III/Common Items
Combat Helicopters
NATO Armaments Ballistic Kernel (NABK)
Underwater Combat System
Surface Combat System
Amphibious Combat System
Naval Air Defence System
Span in the cooperation

• VIKING
  – Complex material development- and purchasing project.

• Environment and Hazardous Materials
  – Co-operation between specialists with the purpose of finding substitutions for unwanted chemicals and materials.
INTRODUCTION TO NORDAC

The Nordic countries, Denmark, Finland, Norway and Sweden, have been working together in a number of areas to develop and modernize their armed forces and defence.
Nordic Materiel Co-operation
Skeleton Nordic Directive

for
“Joint Collaboration Group on Environment and Hazardous Materials”

Produced by:
• The Nordic Co-ordination Group

Date: 2004-06-10
Aim and Purpose of the Collaboration Group

- To better utilise the resources of the individual country for the mutual benefit of the participating countries through a closer co-operation and exchange of information.

- To influence the procedures of acquisition in order to create a better basis for purchases with consideration to the environment.

- To expand environmental consciousness and position within the individual organisations.

- To support the individual countries in their relations to the suppliers.

- To contribute to establishing better education by passing on information.

- Investigate legislature and other requirements and alternative documentation if any in the area e.g. STANAGS.

- Information and education in area.
Aim and Purpose Continued

• Elaborate a joint Nordic policy on the areas “Hazardous Materials” and Purchases with Consideration to Environment” based on the requirements of most restrictive country with the aim to enhance the level of the individual countries the most.

• Establishment of a compatible date base and a joint Nordic procedure for registration of chemical products.

• Substitution of undesirable chemical products and materials.

• Establishment of a network and co-ordination and passing on of information and co-operation, among other things, exchange of professional contacts.

• Environmental requirements to the suppliers by acquisition of materiel systems.

• Motivation of the eastern countries to enhance the environ-mental consciousness by passing on information and educa-tion in the area.
Main Projects

1. Management of Hazardous Materials Data Base and MSDS.

2. Replacement of Halon 1211 and 1301 (ODS) in Ships and Aircraft.


4. Chromate Free Primers
Replacement of Halons

- Possible Alternative: Novec 1230
- Laboratory test
- Large Scale
Replacement of Runway De-icer

Alternatives:
- Formates
- Acetates
- Betafrost
- Laboratory Tests
- Large Scale Tests
- Toxicological Evaluation
QUESTIONS?