AMMUNITION MANAGEMENT
IN THE CROATIAN ARMED FORCES (CAF)

6th Meeting of States Parties to CCM
Geneva; 5 to 7 Sept 2016
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- Disposal of Surplus and Unserviceable Stocks
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- Disposal of Cluster Stocks
Types of Ammunition Storages in the CAF

Above Ground Magazine (AGM)

Type “M”
non-perspective

Type “S”
temporarily perspective;
pallet system
Types of Ammunition Storages in the CAF

Underground storages

- Good conditions for long-term storing
- Used for storing of Navy and Army perspective ammunition
Types of Ammunition Storages in the Depots

Earth Covered Magazine (ECM)

- Good conditions for long-term storing
- Used for storing of all perspective ammunition
Types of Ammunition Storages in the CAF

- Building new storage facilities for long-term storage with technical protection
  - Video surveillance storage facilities
  - Centralized double-authorization entry system
  - Automatic temperature and humidity measurement system
  - Motion detectors
  - Automatic fire alarm systems
Stockpiles Storing and Managing

Concept of Ammunition Surveillance

- Visual Inspection
- Disassembly
- Chemical Analysis
- Functional testing of components
- Live firing
Disposal of Surplus and Unserviceable Stocks

- Disposal in three ways:
  - Sale
  - Donation
  - Industrial demilitarization

- Sales of surplus ammunition through the Governmental Agency ALAN

- Donation of surplus ammunition by ministerial decisions

- Sales and donations in accordance with the national and international legislation

- Surplus and obsolete stocks, including the types and quantities, defined by ministerial decisions
Disposal of Surplus and Unserviceable Stocks

**Industrial demilitarization of obsolete stocks**

- By the private company “ISL Spreewerk” in Gospic
- Established in 2007, as a “sister company” of Spreewerk Lübben GmbH (DE)
- Disposal of different types of the CAF obsolete stocks
Disposal of Surplus and Unserviceable Stocks

- Technique OB/OD (Open Burning/Open Detonation)
- Disposal by military capacities
- In accordance with the national legislation
- 1\(^{st}\) step - disassembling in the Support Command workshop
  - separation of cartridge and warhead, defusing, taking out propellant
Disposal of Surplus and Unserviceable Stocks

Technique OB/OD (Open Burning/Open Detonation)

- Open Burning technique
  - Burning old and unstable propellant, gun powder, pyrotechnics
  - Burning obsolete ammunition for small arms (pistols and rifles to 7,62 mm)
  - Controlled burning of air bomb by deflagration technique
Disposal of Surplus and Unserviceable Stocks

Technique OB/OD (Open Burning/Open Detonation)

- Open Detonation technique
  - Destruction of ammunition explosive's components upon disassembly
  - The current capacity by OB/OD technique in the CAF is 500 tons/year
  - Destroyed in the pre-adjusted pits
  - Defined NEQ/pit in accordance with environment limitations (50 kg/pit)
Sponsored Disposal of Surplus and Unserviceable Stocks

- Financial support by the US Government through PM/WRA Agency

- MANPADS Program, CWD (Conventional Weapon Destruction and PSSM (Physical Security and Stockpile Management)
  - Industrial demilitarization (cluster ammo, ammo filled with WP, obsolete stocks)
  - Surplus MANPADS and Anti Tank Weapons

- Financial support used for upgrading physical security of perspective ammunition depots with technical protection
Disposal of Cluster Stocks in 2015
Industrial Demilitarization – sponsored by US Government

<table>
<thead>
<tr>
<th>Cluster munition type</th>
<th>Quantity</th>
<th>Explosive submunition type</th>
<th>Total quantity of explosive submunitions</th>
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</thead>
<tbody>
<tr>
<td>Mortar, 120 mm M93</td>
<td>586 (x23)</td>
<td>KB-2</td>
<td>13.478</td>
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<tr>
<td>MRLS M87 ORKAN, 262 mm</td>
<td>26 (X288)</td>
<td>KB-1</td>
<td>7.488</td>
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<tr>
<td>Air bomb BL-755</td>
<td>20 (X147)</td>
<td>MK-1</td>
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<td>ZAB-2,5M</td>
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<td><strong>Total:</strong></td>
<td><strong>639</strong></td>
<td></td>
<td><strong>Total:</strong></td>
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</table>
# Plan for disposal Cluster Stocks to 2018

<table>
<thead>
<tr>
<th>Cluster munition type</th>
<th>Quantity</th>
<th>Explosive submunition type</th>
<th>Total quantity of explosive submunitions</th>
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</thead>
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<td>PTAB-2.5M</td>
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<td>AO-1 SČ</td>
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<tr>
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<td><strong>154.118</strong></td>
</tr>
</tbody>
</table>

- Disassembly and destruction by OB/OD technique - military capacity
- Disposal and destruction by Industrial demilitarization - Sponsored by a foreign Government
The Way Ahead

- Improved risk assessment and reducing of the risk of accidents in the Ammunition Depots (external and internal threats)
- Building of new storages for long-term storage with technical protection
- Disposal of surplus, obsolete, and dangers ammunition
  - Military capacity (OB/OD)
  - Industrial demilitarization
  - Sponsored by a foreign Government or International Foundation
  - Sale and Donation
- Development of guidelines, manuals and regulations for storage, handling and transportation of ammunition and explosives in accordance with the NATO and EU procedures
- Permanent personnel education for Ammunition Life Cycle Management
Thank you for your attention