Case study:
Transport of ammunition through Western Balkans

EXPAL Bulgaria

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Year 2011,
495 tons of ammunition belonging to the Ministry of Defense of Slovenia, including cluster ammunition and manpads, are transported from Slovenia to Bulgaria and disposed by EXPAL
Ammunition

1.080 units
Projectile cluster
PAT 794

176 units Anti-Aircraft rocket SA-18 (Igla)

27.843 Anti Tank
Mines TMA-3

11.752 Anti Tank
Mines TMA-4

108 Rockets HEAT
M57P1

28.308 Hand
Grenades M52P3

47.692 Hand
Grenades M75
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Project Figures

- **495 tons of ammunition**
- **2 types of most sensitive ammo.**
- **7 institutions involved**
- **29 trucks**
- **4 countries involved**
- **239 days for all permits**
- **71 days for transportation**
- **120 days for disposal**

Players

- Slovenian Ministry of Defence
- EXPAL
- Bulgarian Ministry of Economics, Energy and Tourism (Interministerial Commission for Export Control)
- Croatian Ministry of Interior
- Serbian Ministry of Interior
<table>
<thead>
<tr>
<th>PLAYER</th>
<th>MILESTONE</th>
<th>DATE</th>
<th>DAYS</th>
</tr>
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<tbody>
<tr>
<td>Slovenian MoD</td>
<td>Tender Procedure Awarded to EXPAL</td>
<td>22.09.2010</td>
<td></td>
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<tr>
<td>EXPAL</td>
<td>Contract Signed</td>
<td>12.11.2010</td>
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<tr>
<td>EXPAL</td>
<td>Transport Plan</td>
<td>22.11.2010</td>
<td></td>
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<tr>
<td>EXPAL</td>
<td>Contingency Plan</td>
<td>22.11.2010</td>
<td></td>
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<tr>
<td>EXPAL</td>
<td>Import Permit Application</td>
<td>25.11.2010</td>
<td></td>
</tr>
<tr>
<td>EXPAL</td>
<td>Presentation of Technical Documentation (Process sheets and Working Instructions) to Bulgarian Ministry of Economics and Ministry of Interior</td>
<td>09.12.2010</td>
<td></td>
</tr>
<tr>
<td>Bulgarian Ministry of Economics</td>
<td>Import Permit Approved by Bulgarian Interministerial Commission for Export Control</td>
<td>07.01.2011</td>
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<tbody>
<tr>
<td>Bulgarian Ministry of Interior</td>
<td>Further information is requested by Bulgarian Ministry of Interior regarding Cluster Ammo and Manpads (serial numbers and disposal schedule) in order to report United Nations</td>
<td>18.01.2011</td>
<td></td>
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<tr>
<td>EXPAL</td>
<td>Requested Information is presented to Bulgarian Ministry of Interior</td>
<td>20.01.2011</td>
<td></td>
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<tr>
<td>Bulgarian Ministry of Interior</td>
<td>Transport Permit is Approved by Bulgarian Ministry of Interior</td>
<td>29.03.2011</td>
<td></td>
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<tr>
<td>Croatian Min. Of Inter.</td>
<td>Transit Permits Approved</td>
<td>09.05.2011</td>
<td></td>
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<tr>
<td>Serbian Min. Of Inter.</td>
<td></td>
<td>20.05.2011</td>
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### Milestones

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<tbody>
<tr>
<td>Slovenian MoD</td>
<td>Packing List and Transport Plan Approved, Logistics Procedures agreed by both parties</td>
<td>24.05.2011</td>
<td></td>
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<tr>
<td>EXPAL</td>
<td>First Convoy Transport Cluster Ammunition and Manpads from Slovenia to Bulgaria through Croatia and Serbia</td>
<td>26.05.2011</td>
<td></td>
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<tr>
<td>EXPAL</td>
<td>First 10 Manpads are completely disassembled and disposed</td>
<td>30.05.2011</td>
<td></td>
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<tr>
<td>EXPAL</td>
<td>First 48 Cluster units are completely disassembled and disposed</td>
<td>02.06.2011</td>
<td></td>
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<tr>
<td>EXPAL</td>
<td>Disposal of Manpads is finished and certified</td>
<td>08.07.2011</td>
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<td>Slovenian MoD</td>
<td>Official Inspection by Slovenian and Bulgarian Authorities</td>
<td>28.07.2011</td>
<td></td>
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<tr>
<td>Bulgarian Ministry of Interior</td>
<td>Disposal of Cluster is finished and certified</td>
<td>30.07.2011</td>
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<tr>
<td>EXPAL</td>
<td>Last Convoy Transport Ammunition from Slovenia to Bulgaria through Croatia and Serbia</td>
<td>31.07.2011</td>
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<tr>
<td>EXPAL</td>
<td>Disposal of rest of ammunition is finished and certified</td>
<td>27.09.2011</td>
<td></td>
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</tbody>
</table>
1. Logistics Plan

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2. Detailed Packing-list with Compatibility Groups and UN Numbers

3. Transport Plan

4. Reliable Freight Forwarder Company

Import/Export/Transit permits
5. Trucks with ADR certificate

6. Licensed ADR drivers

7. Knowledge and fulfillment of the different national and European Regulations

8. Approved Processes

9. Storage Capacity taking on account present Compatibilities Groups

10. Escort / Security by authorized personnel
Safety
1. Qualification and Training of all involved Personnel
2. Risk Assessment
4. Packaging Evaluation and Approval
5. Marking Evaluation and Approval / Vehicle Hazard Identification
6. Vehicles and Drivers certified by competent authorities

Safety
7. Traffic / Season / Weather conditions evaluation
8. Route evaluation (tunnels, bridges, mountainous terrain, frontiers, high population areas, specific restrain roads…)
9. Incident / Accident response protocol
10. Contingencies Plan and Contingencies Organization
Security

1. Confidentiality
2. Trucks sealed in origin
3. CMR protocol fulfillment
4. Escort by trusted reputable companies
5. Receiving Inspection
6. Security Contingencies Plan and Organization

7. All ammunition components and subcomponents movements are tracked and recorded
8. Involved personnel fill and sign daily file with tasks developed and ammunition involved
9. Security clearance for all involved personnel
10. Security Coordinator
Contingency Plan

Framework for individual and collective behavior in case of out-of-normal circumstances with purpose:

- Protect Personnel and Assets until normal operations conditions are resumed
- Ensure viable capability to respond to incidents
- Manage response, resumption, recovery and restoration activities
- Support and Cooperation with National Security forces
- Avoid panic and disinformation situations among population

Keystones: Logistics

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1. Risk Assessment for out-of-normal conditions
2. Teams, roles and responsibilities in case of incident / accident
3. Define Preventive Actions
4. Define Corrective Actions
5. Ensure Emergency Procedures and Resources
6. Train and Exercise Procedures
7. Define Communication and Report to Management and Authorities
Legal Requirements

1. Republic of Bulgaria Law for arms, ammunition, explosives and pyrotechnics articles
2. Republic of Bulgaria Defence-Related Products and Dual-Use Items and Technologies Export/Import Control Act
3. European Agreement concerning the International Carriage of Dangerous Goods by Road
5. EU Directive 2009/43/EC

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Disposal Operations

Complete Disassembly of Subcomponents

Explosive Discharge

Heat Treatment
NO DISPOSAL BY DEMOLITION !!!

All our disposal processes fully respect and protect the Environment

No uncontrolled air emissions
No Red Waters

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Disposal Operations

Cluster empty shells
Destroyed Manpads guidance systems
Destroyed Manpads rocket tubes
Cluster bomblets
Disposed AT Mines
Explosive extracted from
Success Keys

1. Active Participation and Full Support of the Ministry of Defense of Slovenia in all phases of the project

2. Rigor and Strict adherence to the Law by the authorities of the Republic of Bulgaria

3. Clear definition of Roles and Responsibilities

4. Open Communication between all involved players

5. Plan, Plan, Plan… What must happen and what to do if the unexpected happens

About EXPAL

EXPAL, Defense Business Unit of the MAXAM Group, represents the first Spanish Group and a European Leader in Demilitarization Services and Soil Remediation.

EXPAL manages all operations for the destruction of ammunition at the end of their working life, allocating all recycled components to their reuse in the civil industry, explosives for public works, mining industry, hunting powder, etc.
EXPAL owns demilitarization centers in Spain (2), Bulgaria, Denmark, Italy and Belarus.

EXPAL provides all around the globe the safe disposal and recovery services of ammunition, explosives, pyrotechnics and EOD Services:

- Training
- Demining
- UXO (Unexploded Ordnance) Clearing
- BAC (Battle Area Clearance) and ERW(Explosive Remnant of War)
- Facilities Demilitarizacion
- Mobile Plants
- Soil Remediation

**About EXPAL Bulgaria**

- Started its activity in 1.895 with the manufacturing of powders
- Acquired in 2007 by MAXAM Group
- Since 2007 investment is focused in demilitarization activities
- Today is one of the most modern, safe and environmental friendly facilities in Europe for demilitarization activities
- Authorization, facilities, equipment, manpower, knowledge and experience for the disposal of conventional ammunition NATO and Warsaw
- High explosive rounds, armour piercing, pre-fragmented, cluster, illuminating, incendiary, cargo, smoke, WP, mortar ammo., hand grenades, rockets, aviation, cluster, small calibers, blasting mines, engineering explosives, pyrotechnics, detonating cord, blasting caps…
- More than 500 references and 15.000 tons of ammunition destroyed in last four years
Conclusion:

The real successful collaboration between the Ministry of Defence of Slovenia and EXPAL Bulgaria shows that the movement of ammunition across borders for its demilitarization is not an added risk but a driver of success when exist:

1. Open communication
2. A clear Legal Framework
3. Detailed Risks Assessment
4. Effective planning
5. Technological resources and expertise

THANKS FOR YOUR ATTENTION!!
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