

The background features a large, circular logo for NAMSA Luxembourg. The logo is rendered in a light blue color against a dark blue background. It consists of an outer ring with the text 'NAMSA' at the top and 'LUXEMBOURG' at the bottom. Inside the ring is a central emblem featuring a four-pointed star or compass rose design.

NAMSA DEMILITARIZATION PROJECTS

PREPARED FOR:

**Stockpile Destruction Committee
Geneva
30 May 2002**

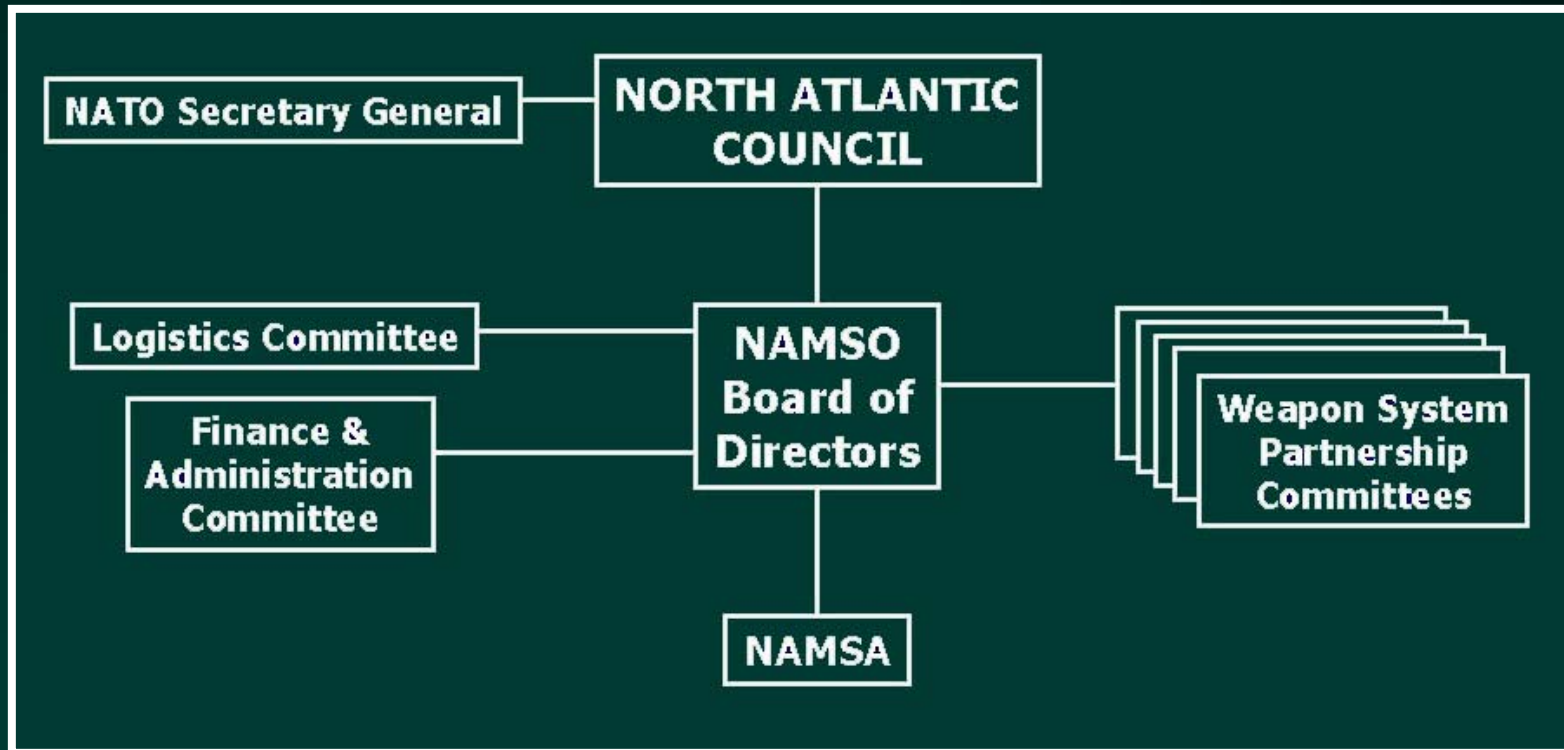
PRESENTED BY:

**Steve Brown
Senior Technical Officer
Ammunition Section
Special Projects Programme**

NAMSA's Position within NATO



- **The NATO Maintenance and Supply Agency (NAMSA) is the executive arm of the NATO Maintenance and Supply Organization (NAMSO)**
- **It was created in 1958 by a North Atlantic Council decision**





Special Projects Programme Ammunition Section

- ❑ Ammunition Procurement through Weapon System Partnerships
- ❑ Ammunition Demilitarization
- ❑ PfP Trust Fund Projects
- ❑ NATO Ammunition Data Base

- ❑ *Stinger Support*
- ❑ *Mk 46 Torpedo Support*



Ammunition Disposal And Demilitarization Techniques

Expedient Solutions

Sale or gift

Rapid firing

Open burning

Open detonation

Industrial Solutions

Disassembly

Melt-out

Washout

Reclamation and conversion

Cryogenics

Incineration

Open Burning and Open Detonation (OBOD)



... is prohibited within NAMSA contracts



Why?

- ❑ To protect the environment
- ❑ To protect NATO, NAMSA and nations from litigation
- ❑ To apply common standards for demil contracting



NAMSA Demilitarization Projects

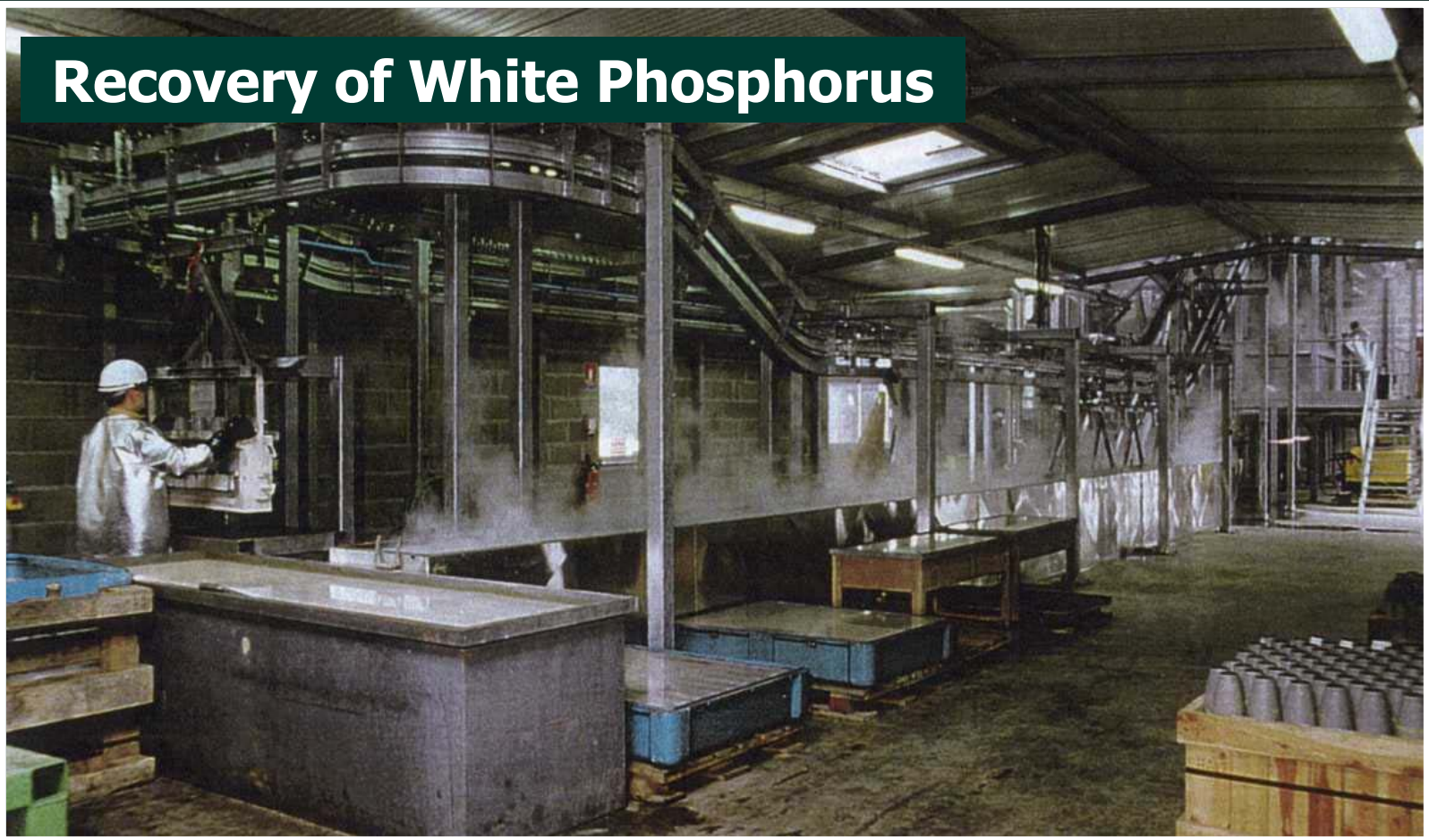
No of Contracts: *54*

Customers: *Canada, Denmark, France, Greece, Italy, NATO, Netherlands, Norway, Portugal, Spain, UK, US*

Contractors in: *Albania, France, Germany, Italy, Moldova, Norway, Spain, UK, Ukraine*

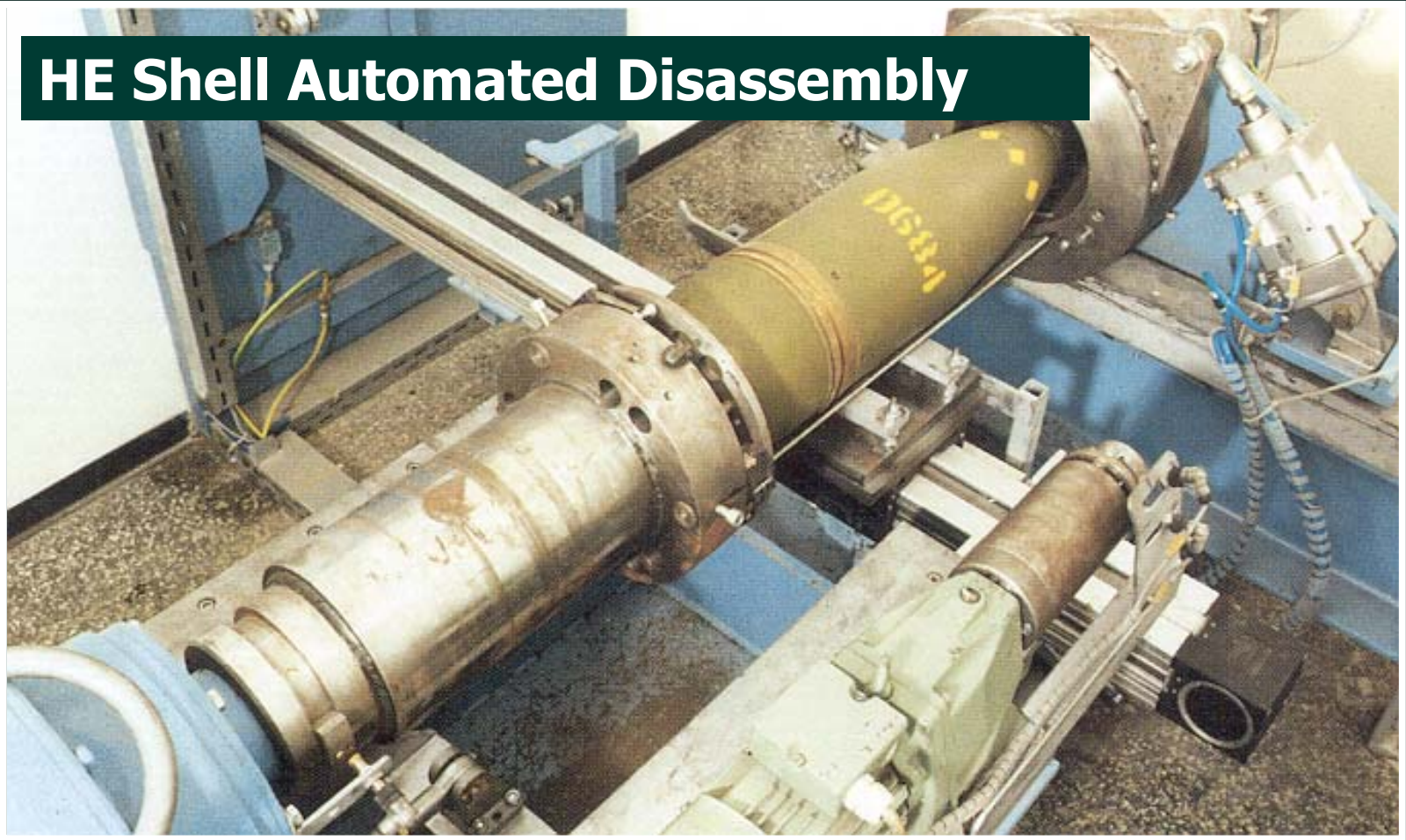
Ammo Types: *GM, Artillery, Grenades, Mortars, Landmines, Sea mines, Pyrotechnics, Lachrymatory, WP, DU, Aerial bombs, Cluster bombs, Liquid propellant*

Recovery of White Phosphorus



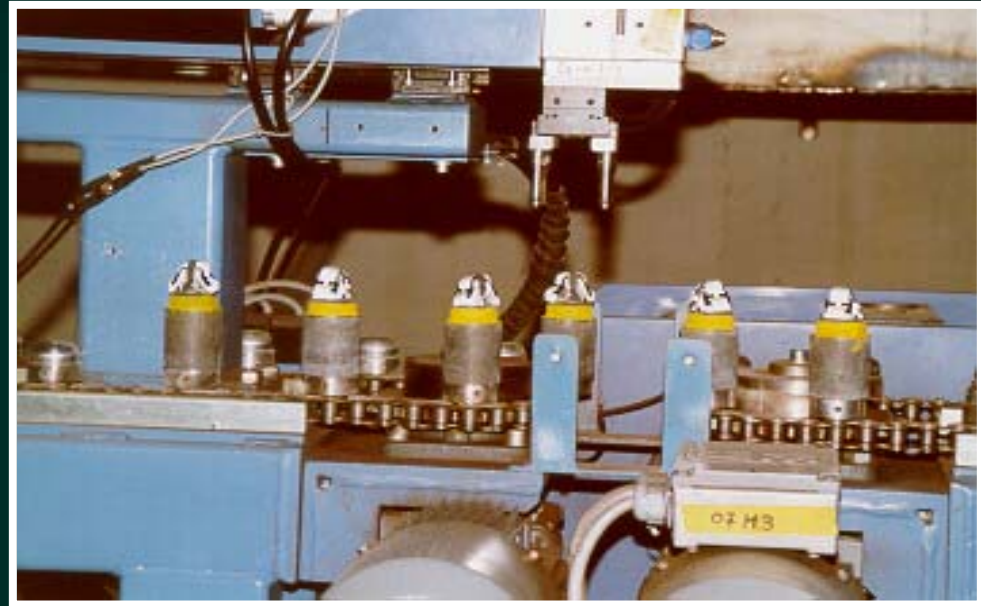
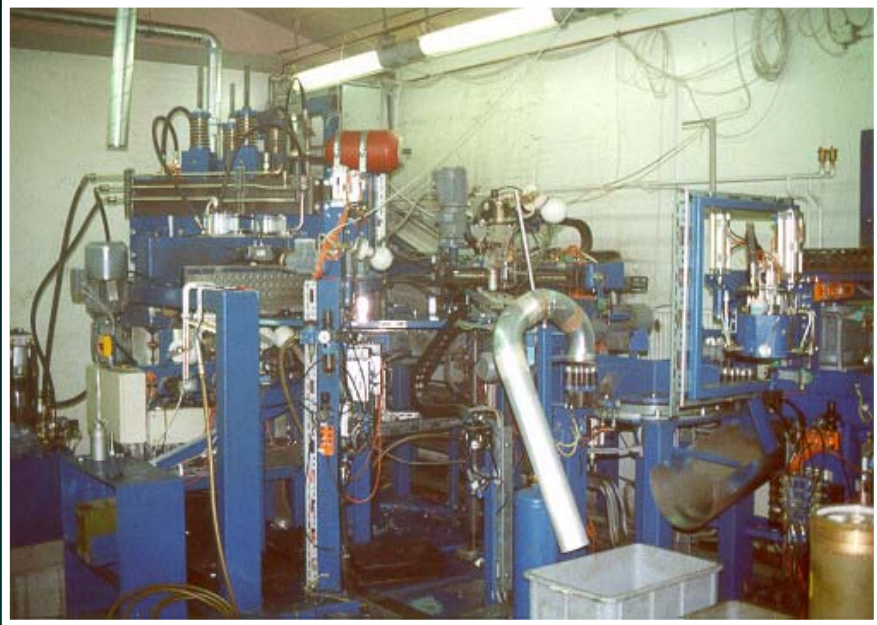


HE Shell Automated Disassembly



Breakdown of Aerial Denial Dispenser





Processing High Explosive Sub Munitions

Thermal Incineration Plant

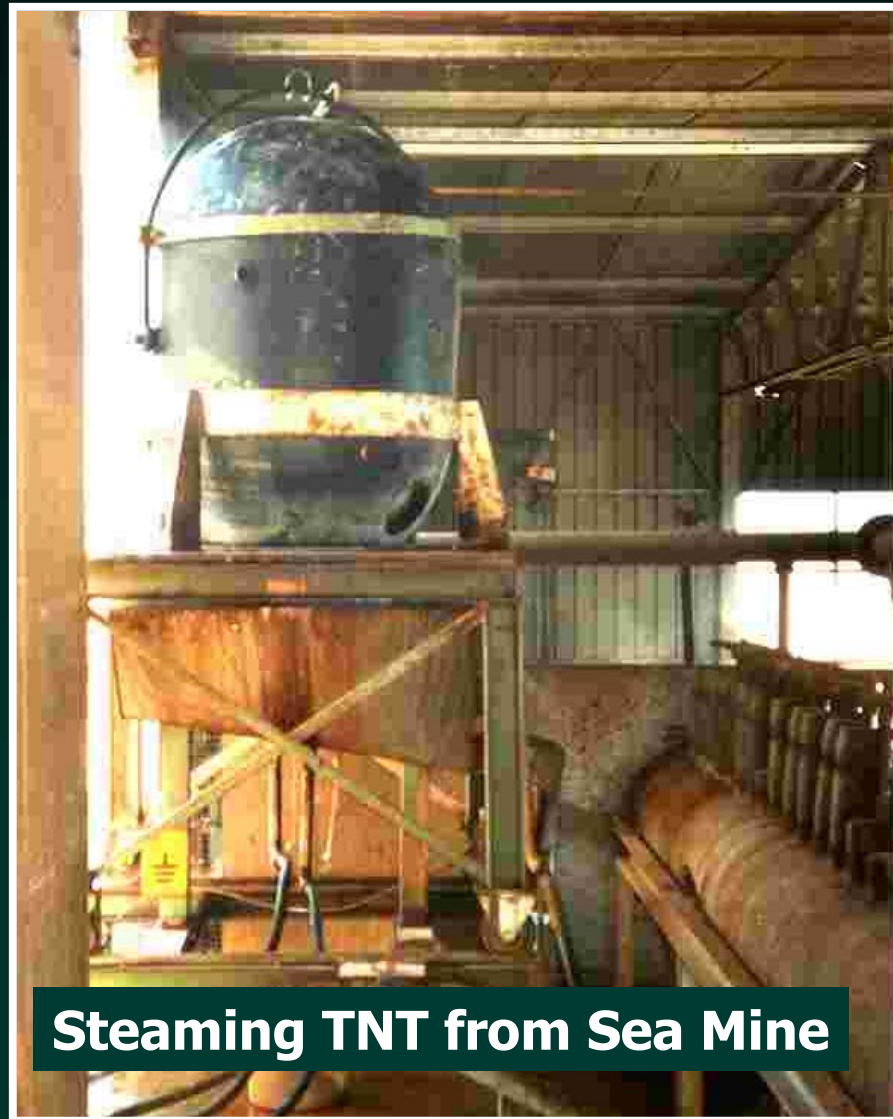


Deep Mine Demilitarization by Detonation



Cryofracture of High Explosive sub-munitions





Steaming TNT from Sea Mine



**NATO
PARTNERSHIP
FOR
PEACE
(PfP)**

Partnership for Peace Countries



* Turkey recognises the Republic of Macedonia by its constitutional name



NATO PfP Trust Fund

Established in 2000 to provide a mechanism to help Partner nations meet Ottawa Convention obligations

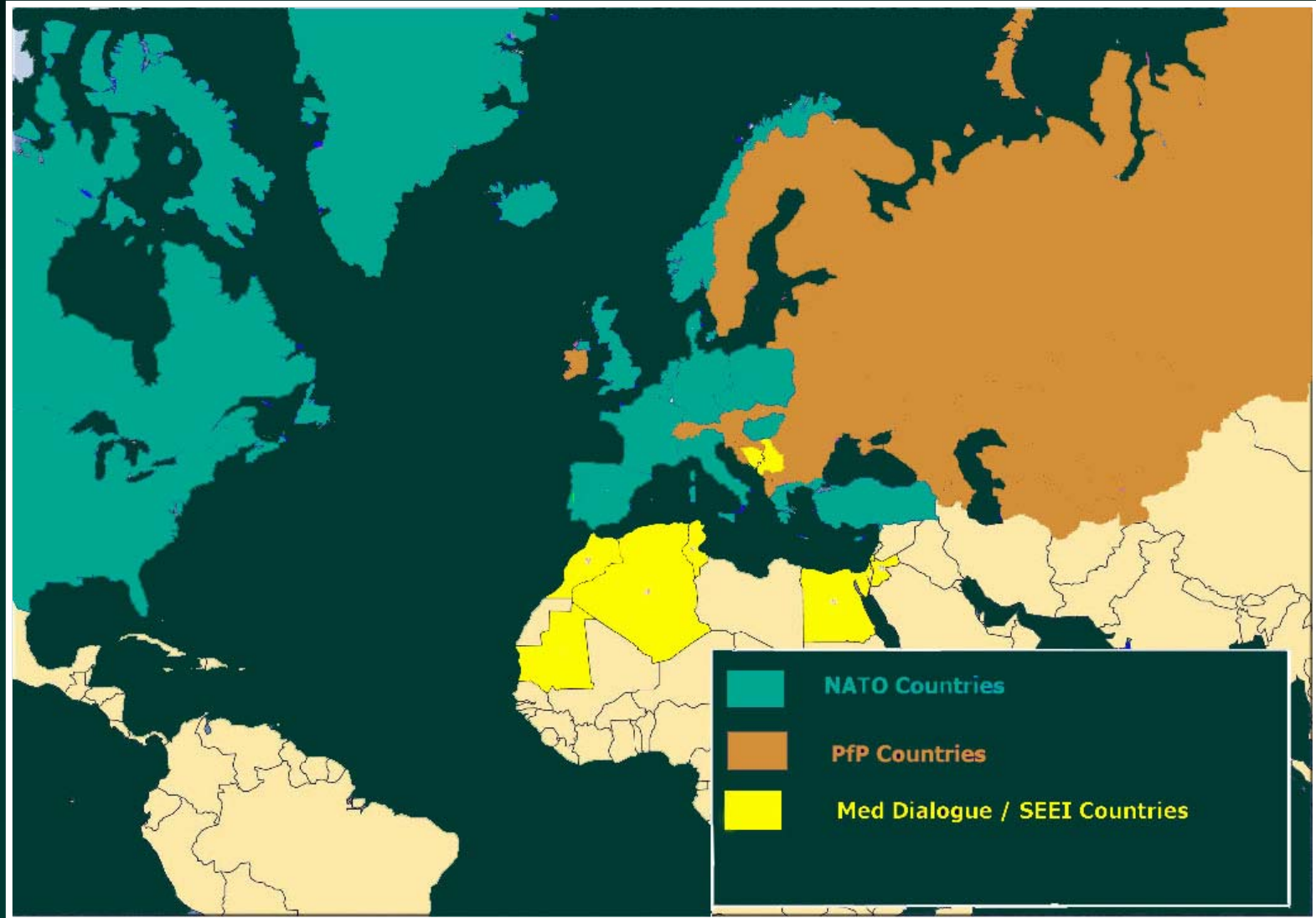
2001 extended to include:

- ❑ Small Arms and Light Weapons
- ❑ All conventional munitions

2002 may be extended to include:

- ❑ All elements of Partnership Work Programmes
- ❑ Nations of Mediterranean Dialogue and South East Europe Initiative

NATO's PfP Trust Fund – Area of Interest





The NATO PfP Trust Fund Process

Projects to be sponsored jointly by a NATO nation and the Partner nation

Any nation or international organization may be donors

Binding Agreements between Partner, NATO, donors and NAMSA

NAMSA acts as executing agent



PfP Trust Fund Projects

Destruction of APM Stockpile Albania



First NAMSA PfP Project

Aim: Demilitarize 1.6 Million APMs

Target: Complete in 16 months

Supplementary: Build local capacity for future demilitarization

Cost: US\$ 800.000

Sponsors: Canada and Albania

Donors: Austria, Belgium, Hungary, Norway, Netherlands, Switzerland, UK

Status: Completed 4 April 2002





Facilities

Before...



...after

Processing Mines



Recycling



Milled TNT mixed with ammonium nitrate to make ammonite for use in civil engineering projects in Albania and Kosovo.

Recycling



Fragmentation mine bodies smelted to make manhole covers and steel reinforcing rods .

Destruction of APM Stockpile Albania Achievements



Completed 4 April 2002, ahead of schedule
and within budget

1,683,860 APM destroyed:

- 1,675,760 APM were demilitarized at ULP Mjekës, without accident or incident
- 8,100 APM destroyed on SAZAN Island by open detonation with US Navy EOD assistance



1,100 tonnes of ferrous metals recycled

192 tonnes of TNT converted into ammonite

410,000 kilometres driven by the AAF without
accident or incident

Moldova Projects



- Aim:** Disposal of Melanj oxidizer
Destruction APM Stockpile
Destruction surplus munitions
- Target:** Complete by end 2002
- Cost:** US\$ 1,079,000
- Sponsors:** Netherlands and Moldova
- Donors:** Canada, Germany, Hungary,
Luxembourg, Poland, UK, US
- Status:** NAMSA project team Dec 2001
UK EOD training Feb 2002
Melanj contract award Apr 2002
Range road contract award Apr 2002



Melanj Liquid Propellant Oxidiser



Disposal of Melanj from SA5
missile site at Dançeny



Disposal of APM & surplus munitions



Disposal of 12,000 PMN type APM and surplus munitions including missile warheads by open detonation

Disposal of APM & surplus munitions



Preparation includes EOD training and construction of range road at Bulboka Training Area

Destruction of APM Stockpile Ukraine



Aim: Demilitarization PMN & PMN2 Stockpile

Target: Complete by mid 2003

Cost: US\$ 800,000

Sponsors: Canada and Ukraine

Donors: Netherlands, Hungary, Poland

Status: NAMSA project team established Mar 2002
Contract for demil APM award Feb 2002
Contract for transport mines award Mar 2002
Preparatory work commenced Mar 2002



Destruction of APM Stockpile Ukraine

Proposed production facility - Donetsk



Process building external



Storage building

Process building internal –
refurbishment underway





Destruction of APM Stockpile Ukraine Methodology



PMN 2 in hydraulic jig



Broken mine after pressing

Comparison between mines before
and after process



Destruction of APM Stockpile Ukraine Recycling



From ...



... To



Destruction of Small Arms and Light Weapons Ammunition - Albania





Destruction of Small Arms and Light Weapons Ammunition - Albania

Aim: Demilitarize 11.000 tonnes SALW Ammunition

Target: Four year programme

Supplementary: Establish regional capacity for demilitarization work

Cost: US\$ 3.600.000 – capital equipment
(donation in kind)

US\$ 4.000.000 – operating costs

Sponsors: Canada and Albania

Donors: To be confirmed

Status: Project Proposal endorsed by PMSC Feb 2002



Destruction of Small Arms and Light Weapons Ammunition - Albania



APE 1236 rotary kiln of the kind planned for installation at ULP Mjekës





PfP Projects in Yugoslavia (Serbia-Montenegro)



PfP Projects in Yugoslavia (Serbia-Montenegro)



Aim: Demilitarization SALW Stockpile

Sponsors: Netherlands and Yugoslavia

Aim: Demilitarization APM Stockpile

Sponsors: Canada and Yugoslavia

Aim: Clear unexploded air munitions

Sponsors: To be confirmed

Target: To be confirmed

Cost: To be confirmed

Status: Preliminary visit Apr 2002
Discussions continuing



PfP Projects in Georgia

Aim: **APM, SALW disposal and technical training**

Target: **To be confirmed**

Cost: **To be confirmed**

Sponsors: **Luxembourg and Georgia**

Donors: **To be confirmed**

Status: **Feasibility study to be undertaken June 2002**



PfP Projects in Kyrgyz Republic

Aim: Remediation former military sites

Target: To be confirmed

Cost: To be confirmed

Sponsors: Luxembourg & Kyrgyz Republic

Donors: To be confirmed

Status: Bishkek Symposium 27 – 28 May 2002



The background features a circular logo for NAMSA (National Arms and Munitions Service Agency). The logo contains a central emblem with a compass rose and a star, surrounded by the text 'NAMSA' at the top and 'NATIONAL ARMS AND MUNITIONS SERVICE AGENCY' at the bottom.

NAMSA
DEMILITARIZATION
PROJECT

**Any
Questions?**