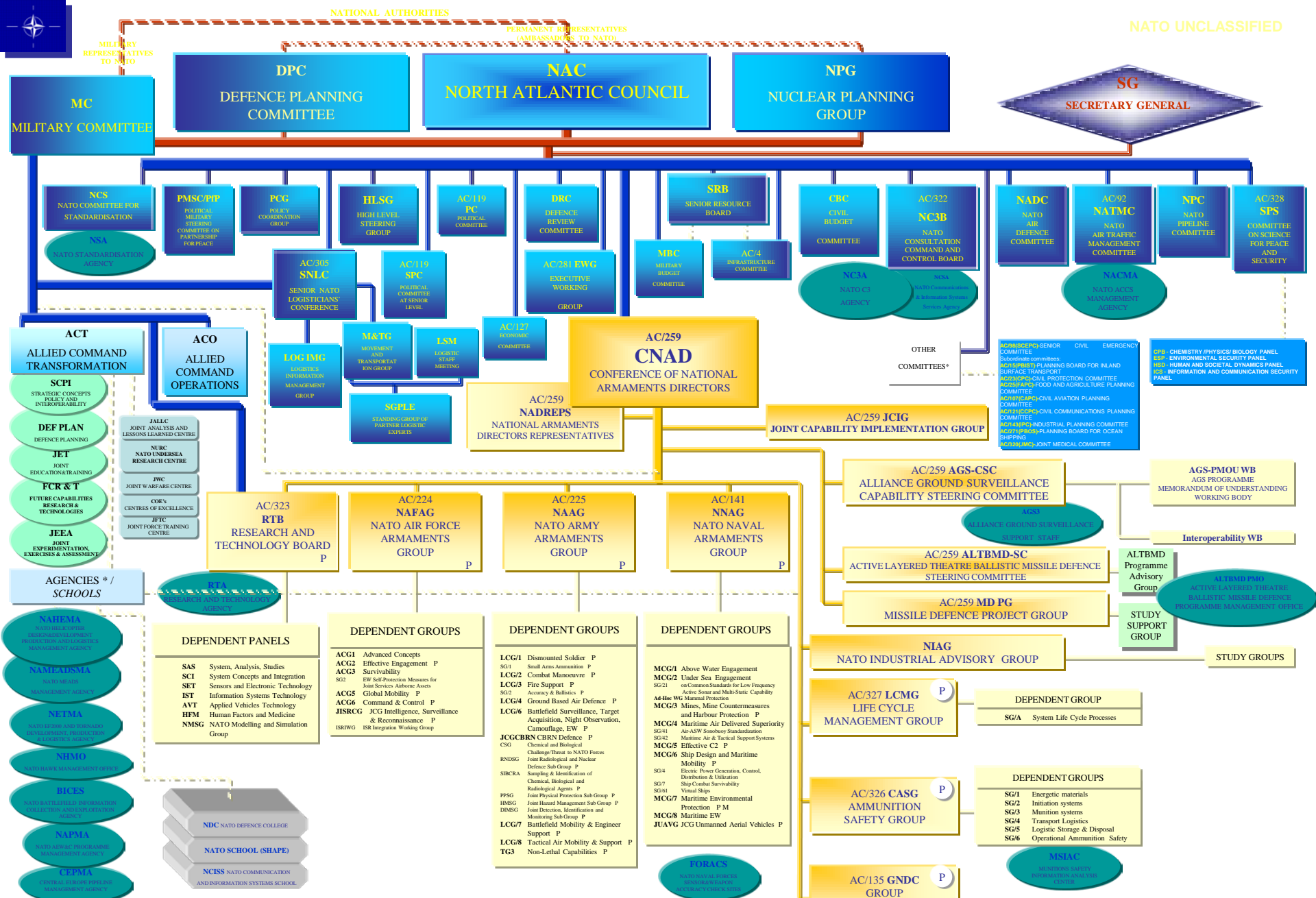


**NORTH ATLANTIC TREATY ORGANIZATION
ORGANISATION DU TRAITE DE L' ATLANTIC NORD
AC/225 Land Capability Group 1
Dismounted Soldier**



**LCol Mike Bodner
Chairman**



LEGEND

- T = Transparent to Partners
- P = Partially open to Partner participation
- M = Open to MD Countries
- W = Some activities are open to Partners (Workshops/Symposia)
- P (in circle) = Partnership Group

- DIRECTION AND CONTROL
- - - LIAISON / CO-OPERATION

* Including: NAMSA, NSA, NC3A, NACMA, RTA, NCSA

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CNAD – CAPABILITY BASED STRUCTURE AND ITS RELATIONSHIPS WITH OTHER NATO BODIES
 Drafted by LL col. eng. Vasile SERBANESCU (2004)
 Defence Section / Permanent Delegation of Romania to NATO
 Updated by Daniela Baluchova (ARM-JAS)

Mission - Main Armament Groups

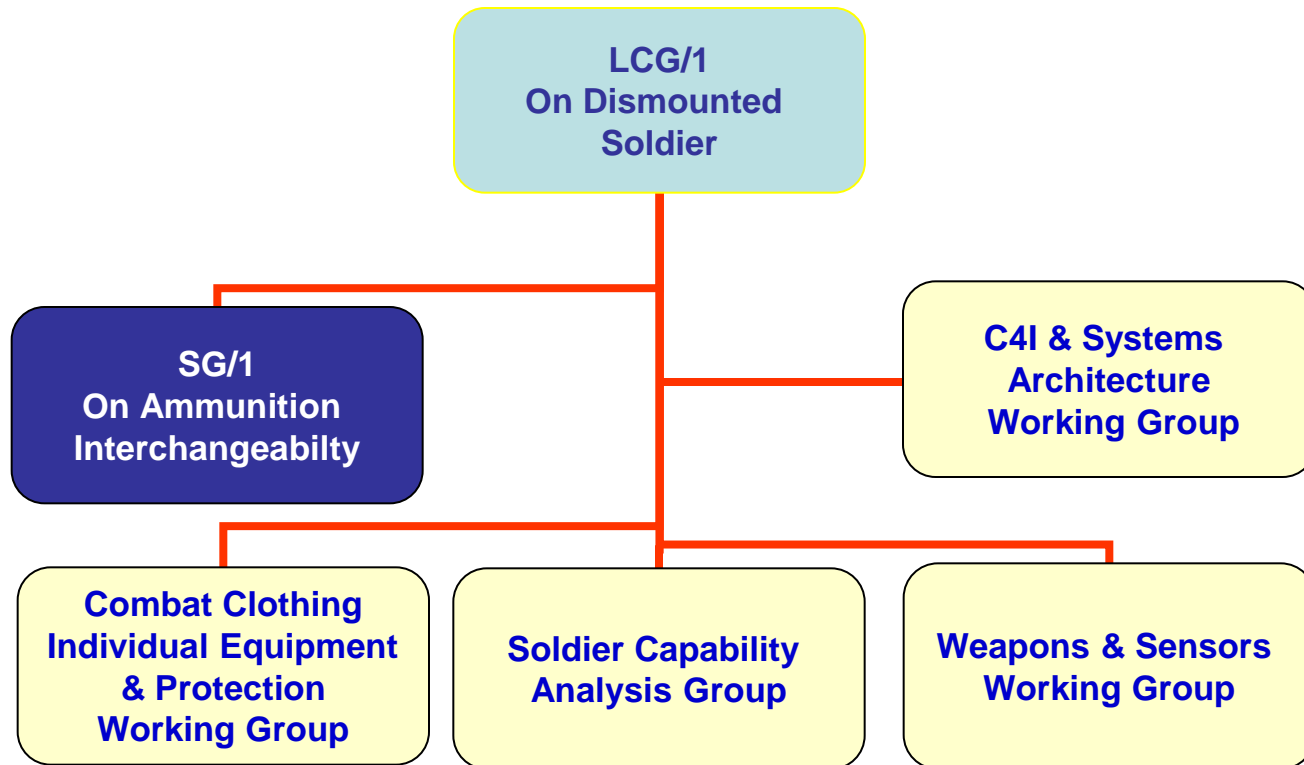
- NATO Armament Handbook – 20 May 2008
 - Foster exchange of Information
 - Promote technical Standardization, Interoperability and Integration
 - Identify and promote Technical advancements
 - Plan/direct/coord subordinate groups
 - Liaise with all relevant organizations
 - Within NATO – RTO, IMS, NIAG, ACT, NSA, JALLC, etc
 - Outside – EU, MD, ICI, NGOs, Industry, etc

Three Levels of Standardization

AAP 6 (01 Apr 2008)

- **Standardization:** The development and implementation of concepts, doctrines, procedures and designs in order to achieve and maintain the compatibility, interchangeability or commonality which are necessary **to attain the required level of interoperability**, or to optimise the use of resources, in the fields of operations, materiel and administration
- Compatibility: The suitability of products, processes or services for use together under specific conditions to fulfil relevant requirements without causing unacceptable interactions (04 Oct 2000).
- Interchangeability: The ability of one product, process or service to be used in place of another to fulfil the same requirements (04 Oct 2000).
- Commonality: The state achieved when the same doctrine, procedures or equipment are used (04 Oct 2000).
- Interoperability: The ability to operate in synergy in the execution of assigned tasks (22 Jun 2004)

LCG/1 and Sub-groups



Two Team of Experts - Power and Head-borne Systems

NATO Soldier System History

- **Working Group of Experts in Panel 3**
 - **1991-1993**

- **NIAG Pre-Feasibility Study Dismounted Soldier Modernization**
 - **1992-1994**

- **WG 3 of Panel 3 Soldier Modernization**
 - **1994- Oct 2000**

- **Topical Group 1 Soldier System Interoperability**
 - **Oct 2000 – Dec 2005**

- **Land Group 1 Soldier Systems**
 - **Jan 2006**

- **Land Capability Group 1 Dismounted Soldier**
 - **Jan 2007**

Land Capability Group 1 Management

- **Chairman**
 - **LCol Mike Bodner – CAN**

- **Deputy Chairman**
 - **LCol Wolfgang Althoff - DEU**

- **NATO International Staff Support**
 - **Matt Dove – Land Armaments Unit, NATO HQ**

- **Land Capability Group 1 - Many Pers (300 experts)**
 - **NATO Countries - 22**
 - **Partners - 4**
 - **Contact Country – 1 (Australia)**

LCG/1 Sub – Group/Working Group Structure

- **Sub-Group/1 Ammunition Interchangeability**
 - **Mr Fridtjof Guth – NLD Chairman**
 - **Iain Morris – GBR Superintendent ERTC**
 - **Dominic Pellegrino – USA Superintendent NRTC**
- **Soldier Capabilities & Analysis Group**
 - **Mr Mark Richter – USA Chairman**
 - **Maj Torstein Johnson – NOR Deputy**
- **Combat Clothing Individual Equipment & Protection WG**
 - **Mr Henk Reulink – NLD Chairman**
 - **Mrs Jana Barancicova – CZE Deputy**
- **C4I & Systems Architecture WG**
 - **Mr JD Wilson – USA Chairman**
 - **Mr Marcel Vanderlee – NLD Deputy**
- **Weapons & Sensors WG**
 - **Mr Per Arvidson – SWE Chairman**
 - **Maj Sean Hoopey – CAN Deputy**
- **Power TOE**
 - **Maj Eelco Vroon - NLD Chairman**
 - **Deputy - Vacant**

Specific Work of LCG 1

Sub Group 1 Ammunition Interchangeability

Qualify NATO Ammunition designs

- **Certify NATO Ammo Interchangeability**
- **Operate NATO Regional Test Centers**
- **Certify National Test Centers**
- **This year**
 - ✓ **Production Tests performed on the 5.56 mm Ball, 7.62 Ball & Tr and 9 mm for FRA, ITA, GBR, CAN and USA**
 - ✓ **Plan to certify the ERTC for the 12,7mm calibre**
 - ✓ **promulgate and start the ratification of STANAG 4624 (30mm x 173)**
 - ✓ **publish the MOPI 30mm (end June 2009)**

Specific Work of LCG 1

Soldier Capability and Analysis Group

- **Serve as oversight and provide operational direction to LCG/1**
- **Provide rationale for work – link to other WGs and TOEs**

- **Completed 3 Dismounted Coalition Scenarios**
Approved by ACT Feb 2007

- **Updating an Overarching Definition and Capabilities document**
- **New NATO Soldier Capability Analysis out for comment**
- **Address Dismounted BCID - STANAGs 4630 and 2129**
- **Address the lack of NATO Soldier Symbology**
- **Address report on Lessons Learned from Ops with JALLC Monsanto**

Specific Work of LCG 1

Combat Clothing Individual Equipment and Protection Working Group

- Group is addressing NATO Long Term Capability Requirement on Integrated Personal Protection (one of the top 16)
- Maintain 16 Other STANAGs
 - 5 in Ratification, 3 in Development, remainder under review
- Identifying long term proposals for NATO research projects
- Updating Laser eye Protection
- Tracking Smart Textiles

Specific Work of LCG 1

C4I / Systems Architecture Working Group and Power TOE

- **“Develop the ability to exchange tactical information and individual soldier positional information at the soldier level” – NAAG Chairman MGen Dam, NLD**
- **Originally developed 4677 (C4I STANAG) and 4678 (Architecture STANAG Data Model) – need to pursue 4 more STANAGs (Exchange Mechanisms, Network Access, Transmission Connectivity and Data Model)**
- **Link to NATO C3 Board on a wide variety of issues**
- **NIAG Study 123 on Information Exchange Mechanisms**
- **Power TOE**
 - STANAG 4619 Electrical Standard for Soldiers – in ratification**
 - New STANAG 4695 – Power Source Interoperability**
 - Strategy - ‘NATO Standard Power Connector’**
 - R and D SET 126 Power Optimization for the NATO Warfighter**

Specific Work of LCG 1

Weapons & Sensors Working Group

➤ **Review STANAGs and Nations SA plans**

New STANAG 4694 “NATO Accessory Rail”

Update:

STANAG 4498 Un-armoured Vehicles, Helicopters & Field
Fortification Targets

STANAG 4512 Dismounted Personnel Targets

STANAG 4513 Incapacitation & Suppression

STANAG 4536 Representative Building Targets

Review Infantry Weapons Master Plan

➤ **RTO Study initiated to address Future Small Arms:**

- ✓ **Weapons interfaces**
- ✓ **Human Factors & analysis**
- ✓ **Electrical Power**

➤ **Deliver a Technical Report by Dec 2009**

World Stage - Soldier Systems



Germany
IDZ-BS
IDZ-ES



USA
Land Warrior
GSS



France
FÉLIN



UK
FIST



Norway
NORMANS



Israel
IAS



Italy
Combattente
2000

Update German National Soldier Modernisation Program



“Infanterist der Zukunft I d Z”

NATO HQ, Brussels

12.-14.11.2008

Karl-Heinz Rippert
bwbu42@bwb.org

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Summary to NDIA SA

- **NATO / NAAG has a capability-based focus to better align with the Allied Command Transformation (ACT)**
- **Considerable History of Soldier System documents, definitions and programmes**
- **LGC/1 is a large group with significant responsibilities – Most Project Managers**
- **All dismounted soldier standardization falls under LCG/1**
- **US Military, Defence Research and Industry play a key roles**

QUESTIONS ?



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