

**NORTH ATLANTIC COUNCIL
NATO ARMY ARMAMENTS GROUP**

Topical Group 1
on
Soldier System
Interoperability

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Deputy Chairman



Topical Group 1 on Soldier System Interoperability

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➤ Chairman:

➤ Vernon E. Shisler

➤ Army Armaments Research Development & Engineering Center

➤ Head of Delegation:

➤ LTC Cindy Bedell

➤ Program Manager Soldier

➤ Level 2 Group that reports directly to the NAAG



Task

Assure Interoperability of Future National Soldier Systems

- Identify areas for standardization,
- Explore potential to adopt common subsystems/modules/components
- Identify implications for NATO doctrine and training
- Coordinate the work with appropriate Land Groups and other NATO Bodies
- Where appropriate develop Standardization Agreements



The Soldier System Concept

A Soldier System is:
“ Integration of
everything the soldier

- ***Wears***
- ***Carries***
- ***Consumes***

for enhanced individual and
collective (small unit) capability
within their national command
control structure.”



Participating Nations

- Australia
- Belgium
- Canada
- Denmark
- France
- Greece
- Germany
- Italy
- The Netherlands
- Norway
- Portugal
- Spain
- Turkey
- United Kingdom
- United States
- Austria
- Azerbaijan
- Romania
- Slovakia
- Slovenia
- Sweden
- Switzerland
- Ireland



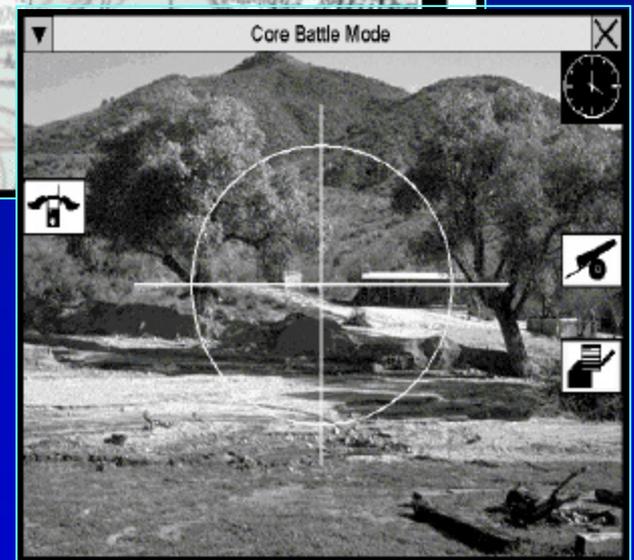
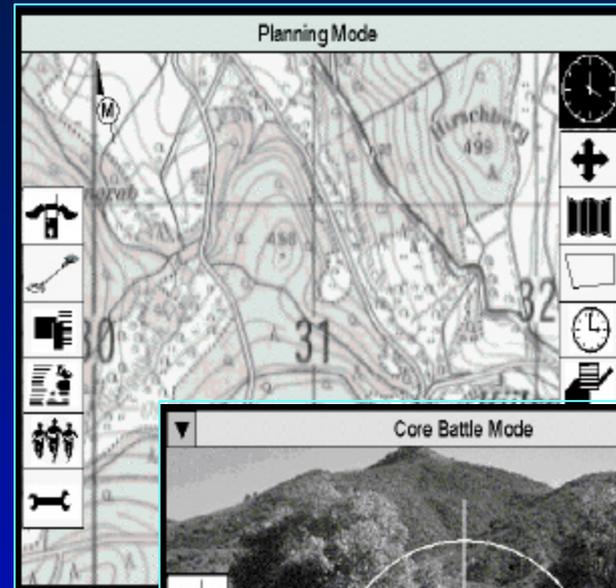
Overview of the Soldier System

The Complexity of Soldier System



Overview of the Soldier System Integrated Fighting System

- Increased Lethality
- Soldier to Soldier Communications
- Digital reporting
- Enhanced Situational Awareness



Overview of the Soldier System Integrated Fighting System

- **Modular design**
- **Mission tailor-able**
- **Opportunity for Interoperability**
- **Links the individual soldier to the Digitized Battlefield**
- **Increased survivability**



The Need



Different focus on different timelines



NATO Soldier 2000 Demonstration

Bergen op Zoom The Netherlands June 2000

- For Senior NATO Officials and Military
- Presentations
- Static Displays
- Live Firing Exercises
- Tactical Demonstrations



Static Displays

11 Nations



Firing Demonstration



France



Germany



United Kingdom

Demonstration
of Soldier
System
Lethality



United States



Tactical Demonstration



Critical Areas for Standardization

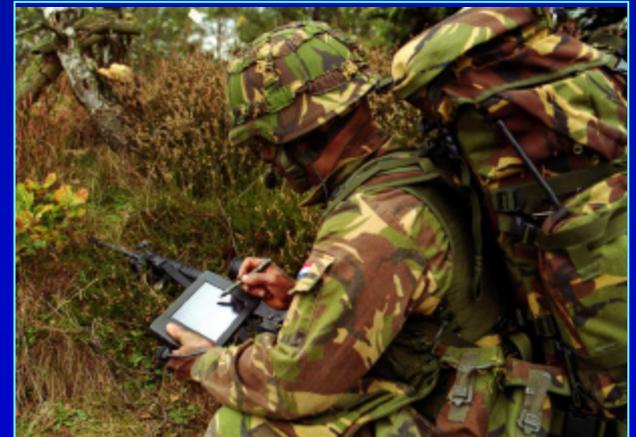
- **C4I**
- **Combat Identification**
- **Power**



C4I

Take C4I efforts to the individual level

- Data transmission protocols
- Agreed levels of voice, text, graphic, & video to effect C3
- Standard report format (small unit)
- Levels of filtering
- Common displays
- Common applications
- Common symbols



C4I

Status

- A procedure and methodology has been identified
- Several experiments have been conducted
- Draft STANAG by October 2002.

Issues

- TG/1 will establish capability to exchange information and communicate at the soldier level
- Current NATO and national policy is that this exchange is done at a higher level
- TG/1 feels this capability needs to be provided and leave it up to the military leadership to determine how to use it.



Combat Identification

Status

- **Five Power Combat Identification Working Group (CIWG)**
 - **Has drafted a NATO Staff Requirement**
 - **Will draft a STANAG**
- **Draft NSR will be coordinated with TG/1, LG/6 and AC/322 SC7 this summer**
- **LG/6 will have the final action to approve and staff the STANAG**



Issues

- **None**



Power

Status

- TG/1 has drafted a STANAG to provide the ability to share power on the battlefield
- Draft is currently being circulated within the TG
- TG expects to approve it at the October 02 meeting for staffing

Issues

- None



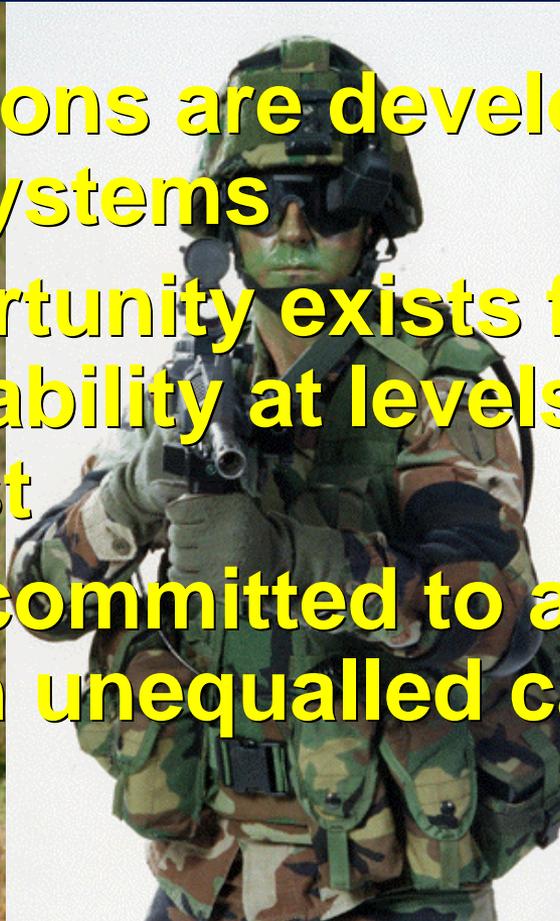
Other efforts

- **Vehicle Interface LGs 2 and 10**
- **Systems architecture**
- **Plugs and connectors**
- **Integrated helmets**
- **Protection levels**



Summary

- Many nations are developing future Soldier Systems
- The opportunity exists for interoperability at levels not possible in the past
- NATO is committed to a coalition force with unequalled capability





**Topical Group 1
has
the leadership
role
to assure
interoperability**