More than 10 years ago, the author and colleagues at the DERA Centre for Human Sciences embarked on a study to examine those social and organizational factors that introduce friction into interactions between national military contingents on multinational operations. Following early scoping interviews with personnel whose most recent operational experience had been in the former Yugoslavia, we also decided to devote some effort to capturing issues arising from the increased requirement for the military to interact on operations with a variety of non-military organizations. The study was conducted in a period from just before 9/11 up to the conclusion of major combat operations in Iraq. This paper will review those early studies and their conclusions in the context of the current focus on a comprehensive approach to operations and the associated requirement for commanders to deliver integrated and coherent effects within complex campaign environments.
Report Documentation Page

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Non-technical interoperability revisited

16th ICCRTS
Collective C2 in Multinational Civil-Military Operations

Keith Stewart
DRDC Toronto

June 2011
Aims

- Review DERA / QinetiQ studies on ‘non-technical interoperability’ in NMOs
- Re-examine conclusions in the context of the subsequent focus on a comprehensive approach
Background

- Multicultural issues raised in UK MOD CRP work on distributed and ad-hoc teams, e.g. communication of commander’s intent, incompatibility of command style (Mills and Pascual, 1997)

- Report of UK DSAC working party on Science and Technology requirements for coalition warfare highlighted the importance of organisational factors (1999)

- Multinational forces studies followed (e.g. Verrall and Stewart, 2000; Stewart, Macklin, Proud, Verrall, Widdowson, 2004)
DERA / QinetiQ MNF studies

“the friction within a machine - human or mechanical - increases in proportion to the number of its parts”

(van Creveld, 1977)

……and is proportional to the goodness of fit!

(Stewart, Clarke, Goillau, Verrall, Widdowson 2004)

• Interview studies conducted aimed at the identification of frictional factors
  – 45 officers with multinational experience (2001/2)
  – 10 multinational ‘leaders’ (2003/4)

• Framework constructed based on DSTO’s Organisational Interoperability model (Clark and Jones 1999, Clark and Moon 2001)
NON-TECHNICAL INTEROPERABILITY*

Tactics, techniques, and procedures
Doctrine
Structure

Unit formation experience
Selection / posting policy

Individual Training
Preparedness of personnel

Individual multinational experience

Organisational Preparedness
Preparedness

Command
Command structure
Command style
Consultative approach
Mission Command
Directive control

Command state
Unity of command
Chain of command

Compatibility of command structure
National influence in command chains

Communications media

Communication and co-ordination between contingents

Understanding

Liaison
Shared intelligence / Information sharing
Non-verbal communication / Body language
Verbal communication

Terminology
Language

Commandibility
Commitment to multinationality

Shared goals and purpose
Perception of mission
Shared strategic purpose
Shared operational approach
National political strategic valuesFr

Interpersonal behaviour values
Culture and values

High level trust
Trust in systems

Level of trust

Low level trust

(Source: Stewart et al, 2004)
Non-military organisations

• Military interviews made it clear that NMOs should be considered in the studies owing to their inevitable presence in complex campaign spaces

• NMO studies conducted (Stewart et al 2004)
  – Interviews included UN OCHA, ICRC, Oxfam, Save the Children, UK DFID
  – Questionnaire study.
  
  • N = 102; 54 from NGOs and 48 from military
Non-military organisations

• General findings:
  – Structured questionnaire items provide an insight into perceived organisational culture (after Schein, 1990)
    • Organisational practices and procedures
    • Pragmatism
    • Morality and values
  – Analysis of free response statements illustrates differences in self / other perceptions between military and NMOs
Discussion points

• The nature of the relationship
  – Comprehensive approach
  – Effects delivery
  – Humanitarian space
  – Control (e.g. Terrell, 2000)
  – Interoperability levels