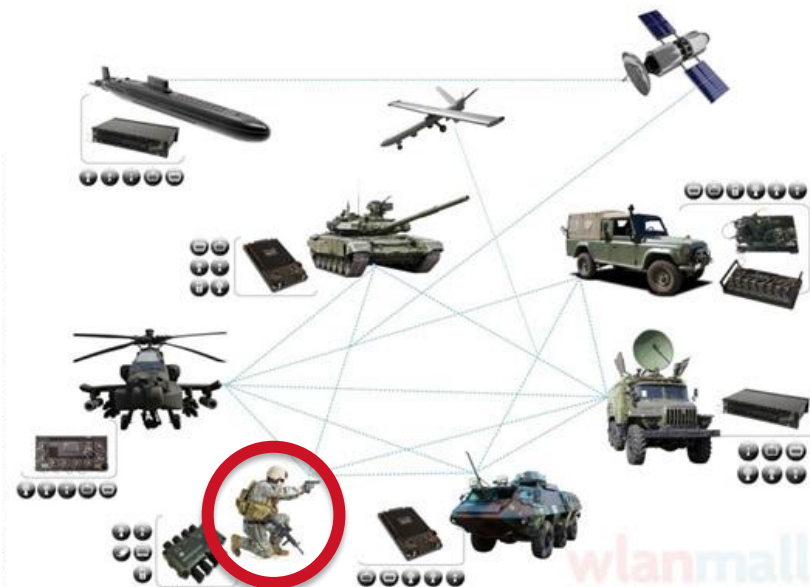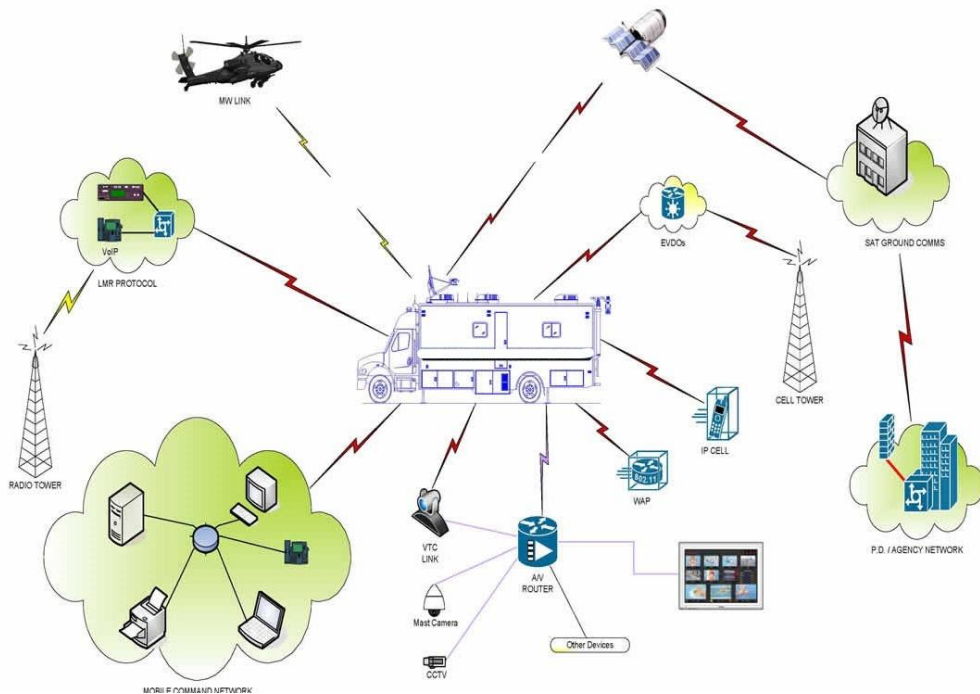# CULTURAL INTEROPERABILITY

Intervening and Measuring Cultural Interoperability in the Context of a Bilateral Mixed Military Unit

Binsch, Ph.D., Hemert, Ph.D. & Wermser, MSc.

TNO innovation for life

MILITARY INTEROPERABILITY

INTEROPERABILITY

NATO

EU, US, …

NATIO-NAL

Doctrinaire Factors
(standards, methods TTP's)

Lack of …

Incompatiblity

Avail-ability

Technological Factors
(equipment, communication systems)

Cultural Factors
(language, divided loyalties,

Preju-stice

historical

Social/emo-tional
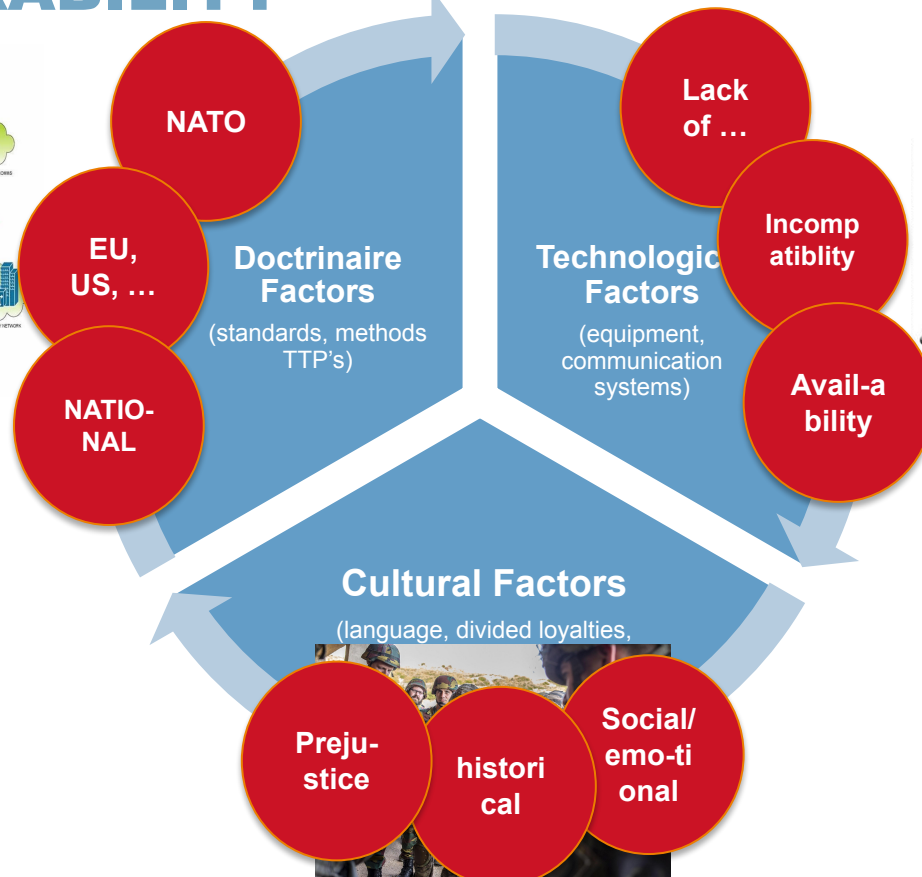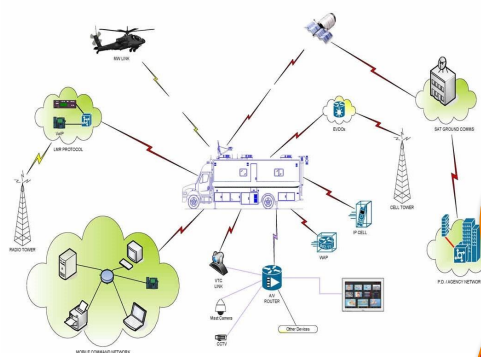
Cultural Interoperability: Reported challenges in multinational military teams

- Boene, 2002, p. 93
  - Language ☐ 46.1% of sample with officers
  - Divided loyalties ☐ 32.6%
  - Cultural differences ☐ 31.2%

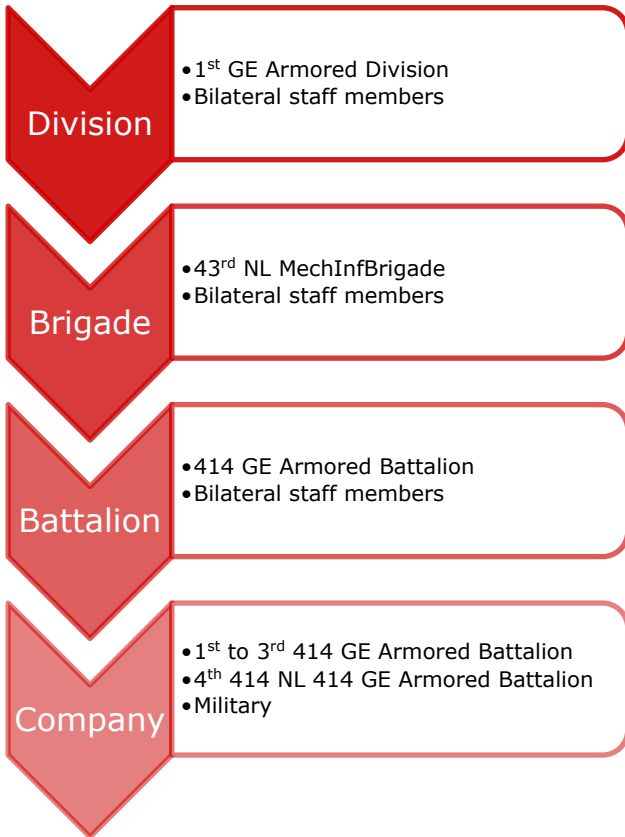# Wermser et al (2019): Measuring Cultural Interoperability with the focus on Identity in the Context of Mixed and Leveled Military Units (project TAURUS)

Contact: f.l.wermser@rug.nl

| Division | • 1st GE Armored Division
• Bilateral staff members |
Brigade	• 43rd NL MechInfBrigade • Bilateral staff members
Battalion	• 414 GE Armored Battalion • Bilateral staff members
Company	• 1st to 3rd 414 GE Armored Battalion • 4th 414 NL 414 GE Armored Battalion • Military

Objectives and Method

› Main objectives:

- – Provide decision makers with evidence-based insights and recommendations on identity, culture and language to support integration Project Taurus

- – Provide the Dutch and German army and military academic institutions with approaches toward cultural interoperability for future military integrations and scientific research

› Method:

- – Survey development on the constructs of *identity* (150+ items)
- – Interviews and three-wave longitudinal survey on division staff level, brigade staff level, battalion staff level and company unit level.

Results
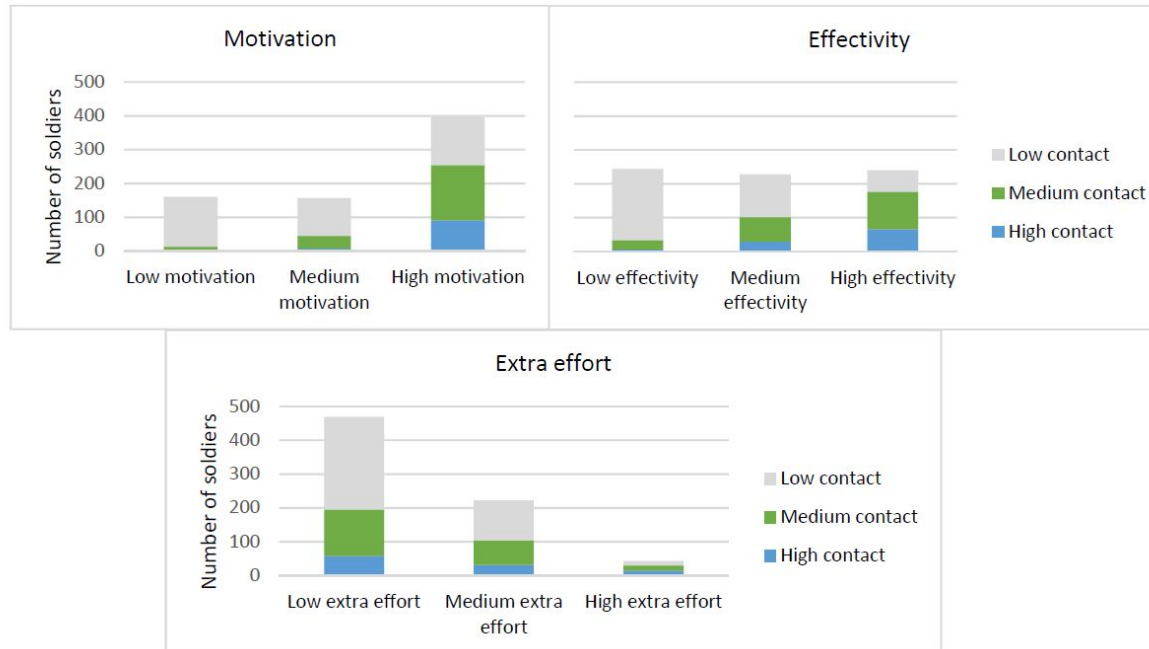
> No major shifts in cultural interoperability from 2017 to 2018

What makes the collaboration successful?

Soldiers…

…acknowledge motives/the need to integrate &
recognize the fit of Dutch and German army

…evaluate change as positive &
develop opportunity mindset

…want to be active part of change &
make a meaningful contribution to integration

…identify with the integrated division &
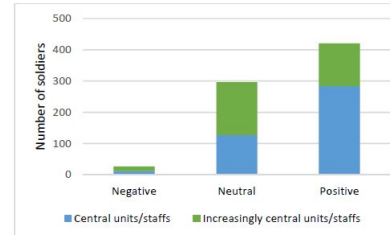are willing to invest effort in collaboration

Figure 2 - Soldiers' evaluation of the creation of an integrated division with soldiers from Germany and the Netherlands (in 2018).
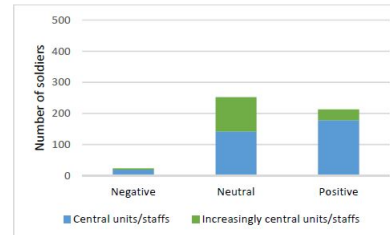

Figure 3 - Soldiers' evaluation of changes in their work activities and environment caused by the integration (in 2018).

Results

- Common identification is low within the integrated division and is higher between soldiers – especially when they are involved in integration process: <u>integration process has a positive effect on common identity.</u>
- Common identity of staff 414 Battalion and German Soldiers of company is high: and with a full scale point lower by Soldiers from the Dutch company

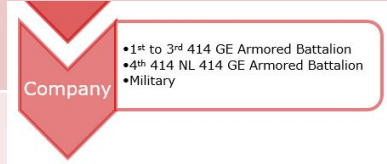| Results revealed from Company Level 1st – 3rd 414 vs 4th 414		About **German** Army Soldiers	About **Dutch** Army Soldiers
Written by **German** Army Soldiers (company level)	Similar	Comradely Motivated Professional Goal-Oriented	Comradely Motivated Professional Goal-Oriented
	Different	Following Rules Bureaucratic	Relaxed Flexible
	Other	Diligent Creative with equipment Disciplined Dutiful	Well educated Helpful Open (openness) Friendly
Written by **Dutch** Army Soldiers (company level)	Similar	Professional Disciplined	Professional Disciplined
	Different	Stiff/ less flexible Strict about rules Less independent Hierarchical Hesitant	Flexible Full of initiative Independent Can-do mentality Go-getters
	Other	Inadequate English Formal Correct	Direct Well educated Doubt about material/ personnel

•1st to 3rd 414 GE Armored Battalion
•4th 414 NL 414 GE Armored Battalion
•Military

Company

Initiation of AMiCi –
Applied Military Cultural Interoperability

- Initiated by the Netherlands Army to apply the results of Wermser et al by research of validated best practices

- Aims
  - Literature review on effectiveness area's of improvement
  - Measuring Operational Effectiveness to identify areas of improvement
  - Dashboarding immediate results of cultural interoperability measurements and the effect of interventions to commanders.

Initial focus: Language fluency

- Speaking a language triggers certain manners of communication (Sussman et al., 1982)
- The shared language (English) is not spoken fluently by all team members (Wermser et al, 2018)
- Literature shows language-based attributions of low competence, low dependability and trustworthiness (Tenzer, Pudelko & Harzing, 2013). In other words, team members who do not speak the shared language as well as others, are evaluated lower by their team members.
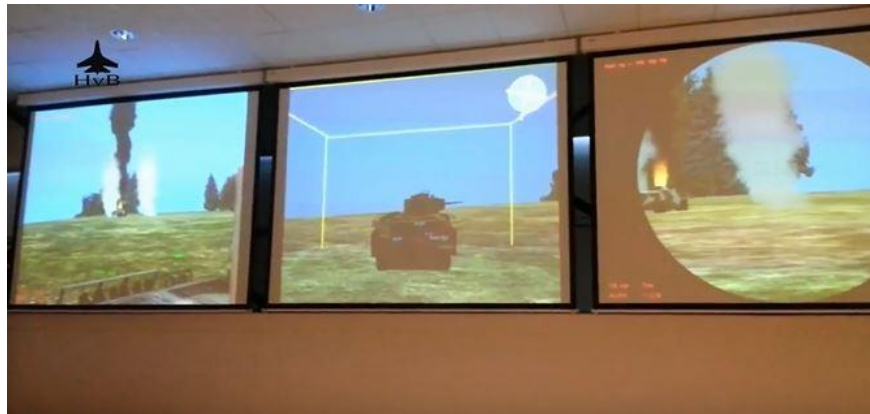
Based on initial AMiCi analyses
- The problem is not so much in the contact between two cultures, but rather the inequality between the two groups
- Lack of equipment is the core of the problem
  - Manifests in issues with intercultural communication and understanding
- Contact between German and Dutch soldiers is limited (mainly command level)
- Common language is not sufficiently enforced
  - Personnel is not sufficiently fluent in common language (English/German)

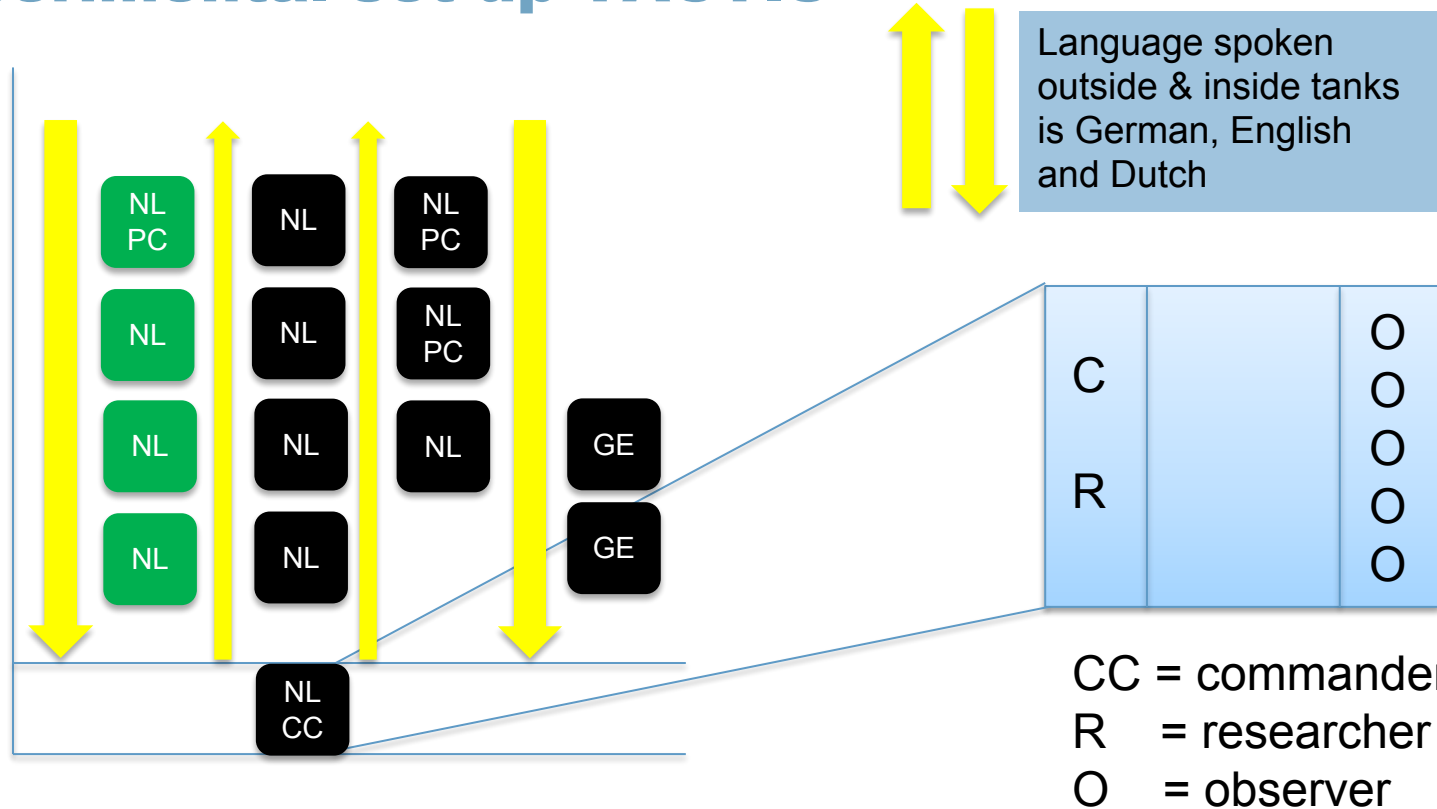Still (!) convinced that operational effectiveness is high despite differences, low identification with mixed unit and limited contact.

Examining Operational Effectiveness under the Use of Different Languages

- Aim:
    - Development of reliable measurement of operational effectiveness by using the TACTIS battle simulator
- Question:
    - Does different language harm the operational effectiveness of a Dutch armored unit?

Experimental set up TACTIS

Language spoken outside & inside tanks is German, English and Dutch

NL PC

NL

NL PC

NL

NL

NL PC

NL

NL

NL

GE

NL

NL

GE

NL CC

C

R

O
O
O
O
O
O

CC = commander
R = researcher
O = observer

Scenario's
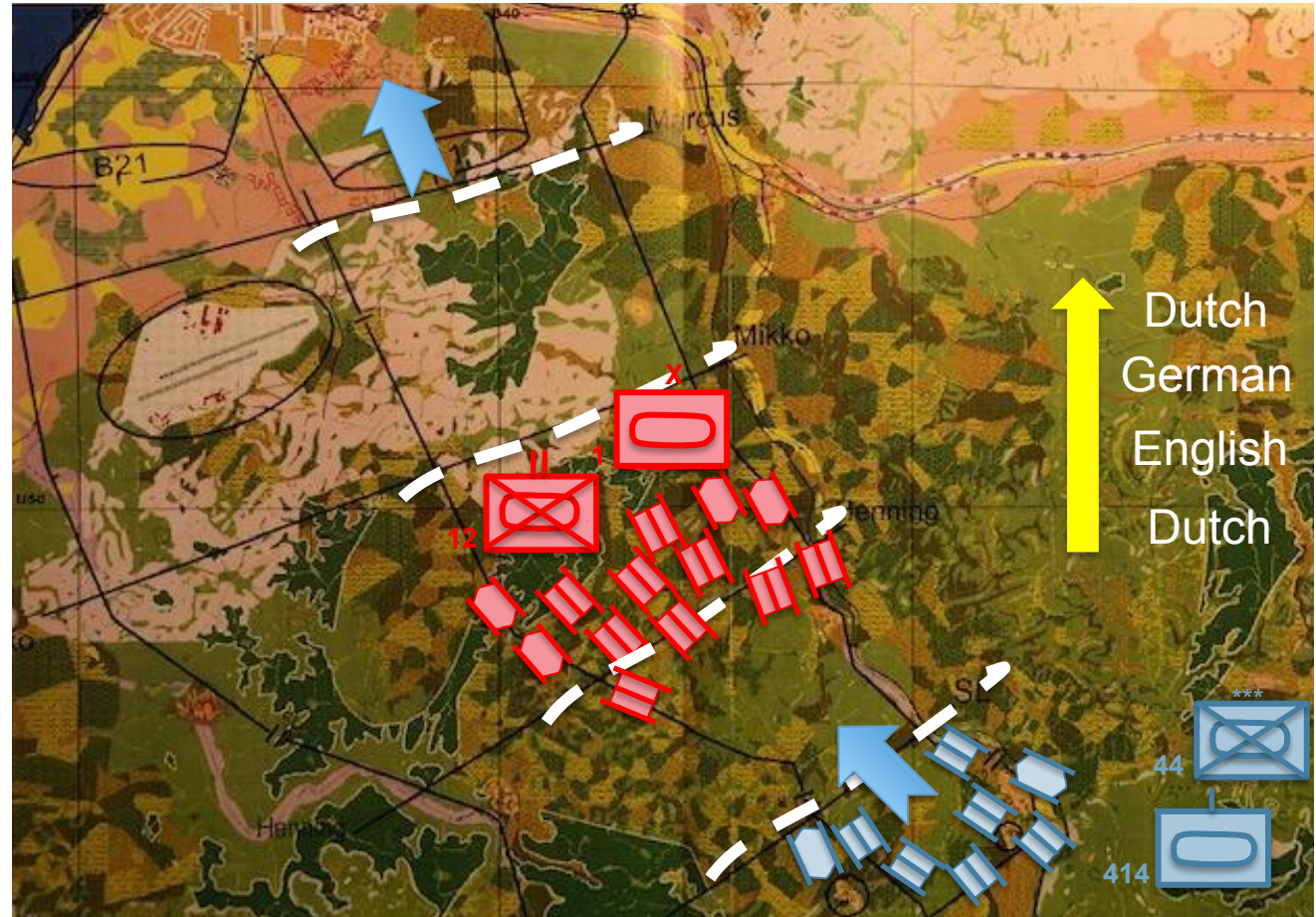
OBSERVATION LIST

Knowledge, Skills, & Attitudes	
Analyses I	The unit systematically examines and assesses problems and questions, selects and deduced relevant information and answers the question: What does this mean for my unit? The unit comes to relevant conclusions about their own performance.
Analyses II	The unit examines new information that may influence its own performance. The unit comes to relevant conclusions about their own performance.
Unit' Focus	The unit has a clear representation of the commander's intent and supports it. The unit knows its role and adjusts its own actions in accordance with this role.
Situation' Focus	The unit understands and influences the influence of social / political factors of influence in its actions.
Creativity	The unit is developing new or original ideas, new view points or even solutions to may arrive at the agreed result. This may also an indicaton that the unit has a high level of control.
Communication	Members of the unit express themselves in such a way that the essence reaches the target group and the relationship remains good. The unit are communicating ideas, opinions and info clear to each other and others in clear, concise and correct language.
Collaboration	Personnel within the unit actively contribute to a common goal or result. The unit works from (sometimes) different interests to a common interest. Personnel within the unit involve each other and others in actions and decision-making and / or consultation.
Coordination	The unit determines priorities and indicates which actions, people, time and resources are required to achieve goals. The unit is acting controlled; actions and activities are distributed evenly to the personnel and are monitored in accordance with the planning.
Networking (for staff)	Not applicable at every organizational level. The unit seeks, maintains and builds up on contacts with colleagues, other organizational units and other organizations, ultimately aimed at achieving the operational objectives together.
Decision making	The unit identifies (potential) problems / threats (military aspects of the weather and terrain / humans, terrain) and resolves them independently or through cooperation with others.
Resilience	The unit continues to deliver good performance under pressure, setback or large opposition. Soldiers within the unit react calmly, confidently and in perspective in difficult situations. The unit comes to a supported judgement regarding complex situations.
Flexibility	The unit adjusts its own ideas and working methods to change the requirements and circumstances if necessary. Personnel within the unit are open to new ideas and actively look for alternatives to achieve the goal.
Result-focus	The unit acts proactively and decisively, higher ranks take action and/or encourage others to also do so in order to achieve survivability of the unit.
Performance-focus	The unit is fully committed to achieve the goal, with the available resources and possibilities.
Sustainability	Even after setback(s), the unit is prepared under all circumstances to continue performing to achieve the goal.

Interculturele interoperabiliteit

THANK YOU FOR YOUR ATTENTION

I will present the results of this experiment and the effects of accompanied interventions at the next IMTA.
See you in the USA? (1/2 ? = !)

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Possible Interventions*

- Language
  - language trainer, translator (less fluency relates to less trustworthiness and competence)
- Divided loyalties
  - Clarify common goal
    - Create more contacts of contact
    - Frame contacts as building towards common goal
    - Common goal should be part of strategic communication
  - Increase motivation to work together and overcome cultural differences (for example, work together on military-specific and pleasant tasks)
- Cultural differences
  - Quick immersion into intercultural setting for commanders
  - Cultural lens, liaison officers

*interventions in this context are seen as relatively small unforced changes in the daily practice of working together, rather than large enforced programs