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# Competencies of Commanders in Network Centric Operations

Defence, Security and Safety

**TNO** | Knowledge for business



# Introduction

Network Centric Operations will result in more collaboration in virtual, ad hoc formed teams.

A virtual team is defined as “a collection of two or more individuals who are geographically, temporally or otherwise dispersed, who collaborate using a combination of telecommunications and information technologies and who are committed to accomplish a task or mission”. (Townsend et al., 1998; Zigurs, 2003; Zaccaro et al., 2004)

NCO changes command, especially leadership, because of the expected consequences:

- From a hierarchical organization to a network organization
- Fewer command levels
- Lower command has more responsibility and authority
- Higher command has a more facilitating role



# Consequences for Leadership 1

- The nature of virtual teams and the environment they are operating in, require more distanced and distributed forms of leadership (Fair, Connaughton and Daly, 2004).

- Distanced Leadership

Leadership from afar, leadership separated in time and place from the team

- Distributed Leadership

The sharing of leadership roles and activities between leaders and team members because the environment is too complex, dynamic and insecure for one single leader to operate effectively.



# Consequences for Leadership 2

- Leadership will be distanced and distributed in future NCO, but leadership activities will remain the same.
- Leadership activities will be executed with different methods.
- Leadership activities will be executed within the more complex, dynamic and insecure environment of virtual networked teams (NCO).

The question is...

What enhanced and additional competencies do future commanders require to be effective distanced and distributed leaders in NCO?



# Method

- Literature search
  - Distanced and distributed leadership in virtual teams (in business settings)
  - Specific literature search on leadership in NCO
- A new conceptualization of competency
- A new competency framework

# Critical issues for distanced and distributed leadership in virtual networked teams

- Building and maintaining trust
- Facilitating teambuilding and cohesion
- Facilitating effective collaboration
- Managing cultural differences
- Providing vision, direction, goals and role clarity
- Establishing and facilitating effective communication structures and processes
- Facilitating information processing and information management



# Building and maintaining trust

- Trust in leader and among team members
- Three forms of trust (Lewis Tyran et al, 2003):
  - Role performance trust
  - Ethical integrity trust
  - Affective bond trust
- Development of trust:
  - Fostering 'swift trust' (Zacarro et al, 2004)
  - Initial face-to-face meeting at the beginning of a task or mission
  - ...



# Facilitating teambuilding and cohesion

Facilitation of teambuilding and cohesion:

- Building a social climate
- Creating social presence among team members
- Considering relative permanence or lifecycle of the virtual networked team
- Managing affective processes from afar
- Clarifying boundary conditions
- Teaching and modeling good feedback and conflict management skills
- Employing emphatic listening skills
- ...



# Facilitating effective collaboration

Facilitation of effective collaboration:

- Promoting collaboration
- Delegating activities
- Balancing structure and flexibility
- Balancing process and task
- Balancing authority and empathy
- Coping with paradoxes
- ...



# Managing cultural differences

- Leaders may reduce the influence of national cultures and cultural differences by developing a strong organizational culture.
- Internalization of an organization culture is done through:
  - Training
  - Knowledge Management
  - Developing appropriate information systems
  - Using integrating practices such as enforcing equality, superordinate goals, and promoting frequent personal and face-to-face contact that promote understanding and linking between different cultural groups
  - ...



# Providing vision, direction, goals and role clarity

- Vision, direction and goals
  - Making clear why the virtual team is formed
  - Communicating expectations of the virtual team
  - Facilitating self-regulative work processes of the virtual team
- Role clarity:
  - Preventing or coping with role ambiguity and role conflict because of multiple roles of team members
  - Specifying team roles and their interdependence
- Micro management



# Establishing and facilitating effective communication structures and processes

Establishment and facilitation of effective communication structures and processes:

- Monitoring, discussing and adapting communication structures and processes
- Developing a positive 'telepresence' to compensate for the visual and audio cues in face-to-face contact
- Leading people through the written word rather than through vocal or physical presence
- Knowing when and what to communicate face-to-face
- ...



# Facilitating information processing and information management

- Potential problems:
  - Information overload
  - Misunderstandings
  - Differences of meaning
- Due to their central position in the communication network leaders may facilitate the exchange, encoding, and storage of information of team members
- Two types of knowledge workers (MacNulty, 2003) :
  - Knowledge warrior
  - Knowledge manager



# Conceptualization of Competency

## Continuum of Competencies

Concrete behaviors

Abstract behaviors



Concrete

Specific

Simple

Observable

Generalization impossible

Abstract

General

Complex

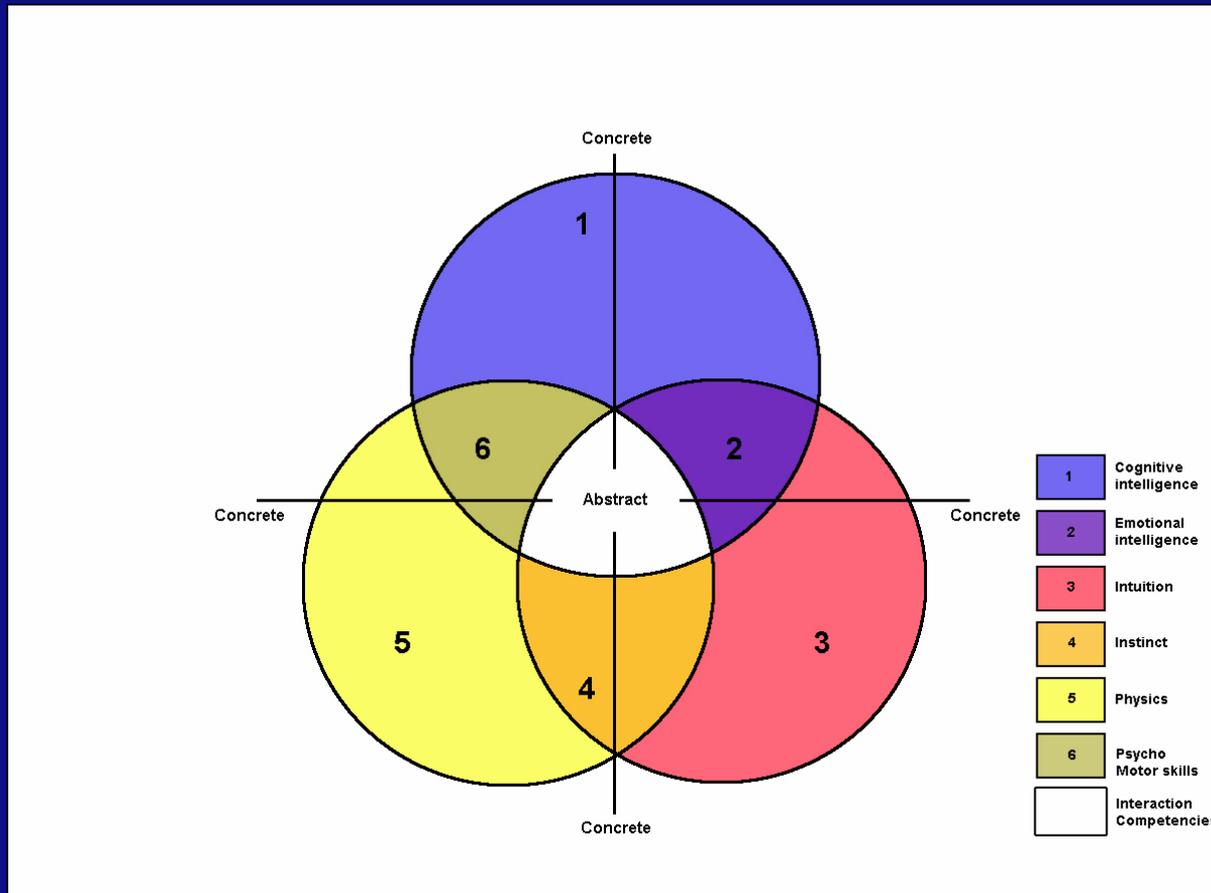
Not observable

Generalization possible

(Jansen, 2002; Hoekstra 2002)



# Competency Framework



# Cognitive Intelligence Competencies

## Prevent and cope with information overload:

- Process information quickly
- Facilitate information processing
- Monitor information and communication processes
- Structure information and communication processes
- Conceptualize, Abstract, Synthesize

## Cope with complex, dynamic and insecure environment:

- Improvise, Multitask
- Visualize the (NCO) environment/situation
- Think creatively and 'out of the box'
- Adapt thinking to changing circumstances
- Be able to make quick, but good decisions
- Sense-making skills



# Emotional Intelligence Competencies

Some examples of emotional intelligence competencies:

- Estimate what communication media to use
- Consider the effects of different communication media
- Write empathically
- Stimulate/facilitate social interaction through electronic communication
- Be aware of own attitude, influence and reactions
- Consider needs and feelings of team through electronic communication
- **Build and maintain a social climate through electronic communication**
- Assess changes in affect through electronic communication
- Cope with role ambiguity and role conflict
- Balance flexibility and structure, empathy and authority
- Cope with opposite military and political goals, moral dilemmas
- Be able to develop a new organizational or team culture



# Intuitive Competencies

Enhanced and additional intuitive competencies concern:

- Sense the atmosphere and ambience
- Sense feelings and needs of individuals and the team
- Sense group dynamics within own team and other teams
- **Sense group processes within own team and between own and other teams**
- Sense political and diplomatic relations
- Sense cultural differences
- Sense positions on social, economical and political issues



# Instinctive Competencies

Enhanced and additional instinctive competencies concern:

- Have a desire for professional and personal growth
- **Dare to take risks**
- Use intuition
- Take the initiative
- Have a drive for innovation
- Be willing to learn continuously
- Act and learn with curiosity
- Adapt rapidly
- Have a drive for complex, ambiguous, dynamic and insecure environments (Baker, 2000; MacNulty, 2003; Leeds et al, 2003; Warne et al, 2004)



# Physical and Psychomotor Competencies

- No enhanced or additional physical competencies were identified to operate effectively in future NCO.
- Enhanced and additional psychomotor competencies mainly concern:
  - Information and Communication Technology (ICT) skills
  - Writing skills (grammar and spelling)



# Conclusion

- An initial exploration of enhanced and additional competencies needed for effective leadership in future NCO.
- These competencies were identified within a new competency framework
- The competencies mainly concern cognitive and emotional intelligence competencies.
- Several enhanced intuitive and instinctive competencies can however also compensate for the absence of face-to-face communication and non-verbal cues.
- Future research: specify and validate enhanced and additional competencies for effective leadership in future NCO.

