The LOCI-method:
Collaboration Building in Complex Endeavors Based on
Analysis of Interdependencies

16th ICCRTS, June 21-23, 2011
Quebec, Canada
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“Moral issues in
network enabled collaborations”
21st century missions

- Highly complex → Creation of coalitions, comprehensive approaches
- Entities from military, political, social, economic domains

- Differences in:
  - Goals
  - Organizational characteristics
  - Political perspectives
  - Values and norms
  - Etc.

- With whom to cooperate in what way?
N2C2M2 (Nato NEC C2 Maturity Model)

- Focus on being able to operate at higher levels of C2 maturity
- C2 Agility: different C2 approaches can be selected for different situations

- No elaboration on how appropriate partners and C2 approaches should be selected!

- New approach: LOCI method
Proposed LOCI method

Interdependence most important determinant and consequence of cooperation choices

Three basic forms of interdependence on

- Input (information, resources)
- Process (operational level)
- Outcome (objectives)

Three critical properties of interdependence

- Degree
- Mutuality
- Correspondence

1) Mathieu, Marks, & Zaccaro, 2001
2) cf. Thibaut & Kelley, 1959
LOCI-Method

1. Determine task and goals
   *Why, What, Where, When, How*

2. Define stakeholders
   *Different techniques possible (e.g., Bryson, 2003, Ramirez, 1999)*

3. Describe dependencies
   *Use of instrument to score dependencies*

4. Representation of results
   *Interdependence Space*

5. Choose partners and cooperation approaches
   *Use of set of generic principles*

6. Create agreement
   *Negotiations stage and commitments stage* (Ring & Van de Ven, 1994)

7. Cooperate
The Interdependence Space

The Loci-Method

Degree of dependence

Degree of correspondence

Input
Process
Outcome
The Interdependence Space

1. You are highly dependent upon another party for certain resources
2. The other party needs these same resources too
3. The other party does not depend on you for resources
The Interdependence Space

1. You have to interact to some extent with the other party to perform your mission.
2. You and the other party can cooperate with each other well.
3. The other party also needs to interact with you to perform its mission.
The Interdependence Space

1. You are highly dependent upon the other party for reaching your goal
2. The other party is equally dependent on you for reaching its goals
3. Your goals and the other parties’ goals are corresponding
Use of Interdependence Space: The LOCI-Method

› In comprehensive approach: interdependencies not fixed:
  › Entities can choose between different potential partners to realize goals
  › Entities can choose between different cooperation approaches

› Hence: Levels Of Chosen Interdependence (LOCI) method
Discussion

- Determine task & goals
- Define stakeholders
- Describe dependencies

- Choose partners & cooperation approach
  - Create agreement
  - Cooperate

LOCI provides an effective method to create insights in potential and requirements for cooperation.

Plans to apply method in large scale Comprehensive approach exercise by end 2011.