

Factors Affecting the Effectiveness of a Coalition C3 System

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Overview



- Coalitions
- Command, Control and Communications (C3)
 - Command and Control (C2) Structures
 - Coalition C2 Models
 - Communications Paradigm
- Coalition C3
 - Coalition C3 Lifecycle
 - Changes in the Coalition
 - Assessment of Coalition C3 Capability

Coalitions



- Conducted by two or more forces
- Includes forces that can be allies and non-allies
- Need to act together for the accomplishment of a single mission
- All coalition operations are different
- Each country has a particular objective and elements of capability to contribute

Command, Control and Communications



C1 = Command is authority of forces

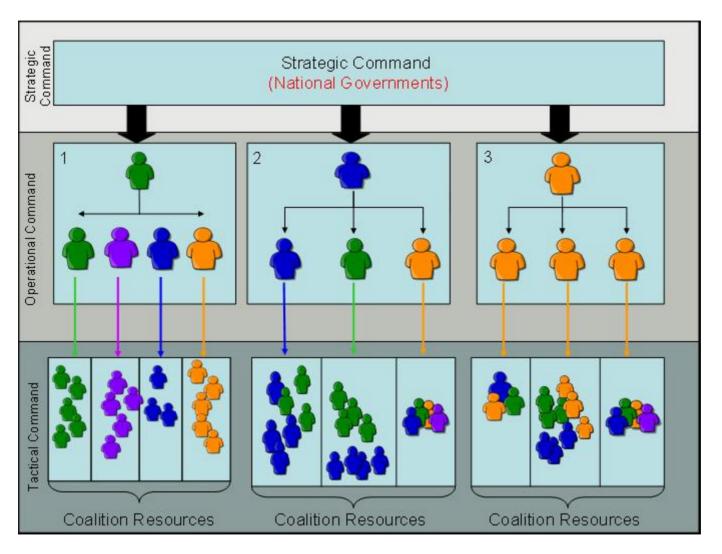
C2 = Control is allocation of resources

C3 = Communications facilitating C2

$$C1 + C2 + C3 = C3$$

Coalition C2 Structures





Parallel

Integrated

Lead Nation

Coalition C2 Models

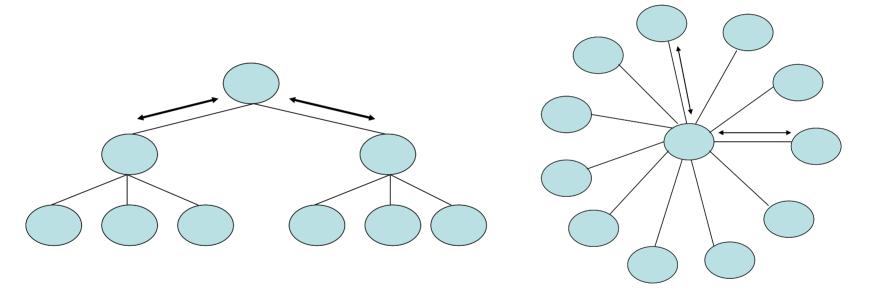


- Centralised
- Decentralised
- Distributed
- Collective

Communications Paradigm



 Different C3 Structures operate under different communications paradigms



Hierarchical

Hub and Spoke

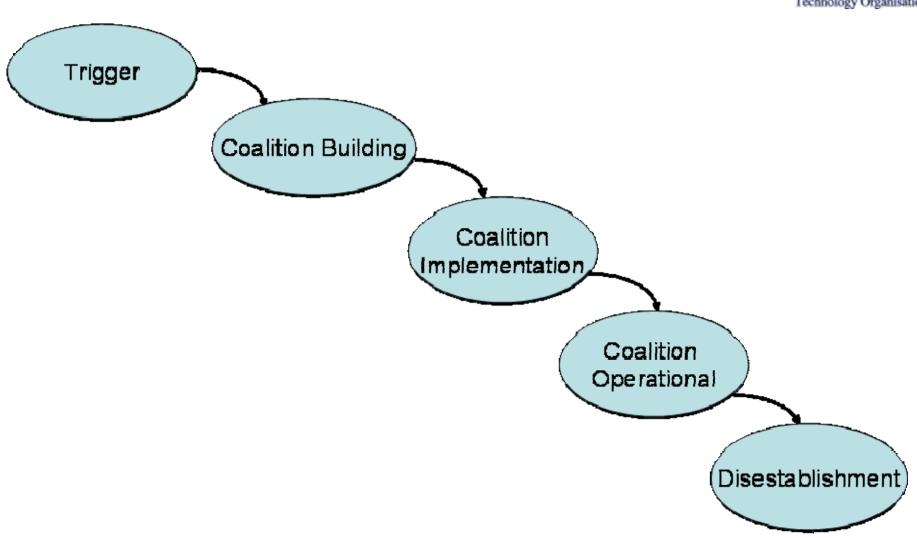
Coalition C3 System



- Model developed to address perceived shortfalls in methodologies by which to assess ADF coalition C3
- Looks at both coalition and the C3 aspects individually
- Describes how each aspect influences the other in the formation of the C-C3 system, and how the system develops over-time.
- Components of a C-C3 System
 - Coalition Entity
 - C3
 - Coalition C3

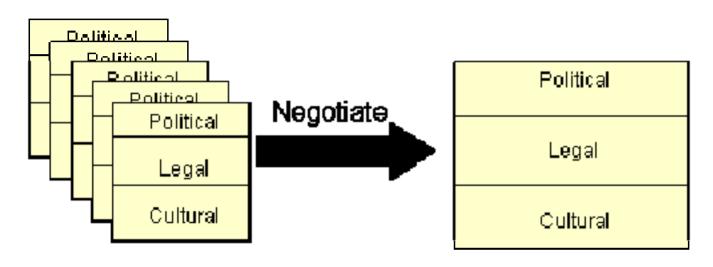
Coalition C3 Lifecycle





Coalition Building



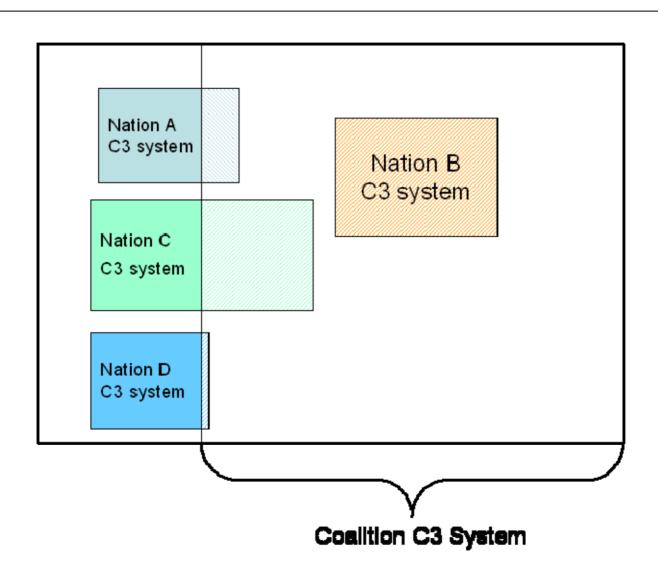


National frameworks

Coalition framework

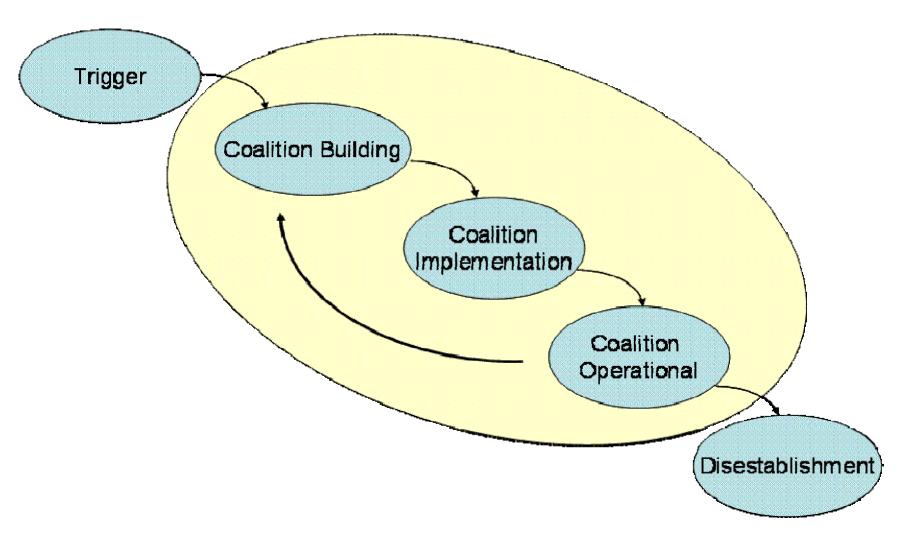
Coalition System





Changes in the Coalition





Assessing Coalition C3 Capability



		C3 Dimensions	C 3 Aspects	Interoperability Considerations
Framework		Folitical Dimension	Intent	Ethos; Political aims; Alignment of ethical backgrounds; Military goals
		Legal Dimension	Authority	Legal constraints/enablers; alliances; agreements; ROE
		Human Dimension	Cultural & Social Issues	Culture; trust; experience; uncerstanding: morale: personality
C3 System	ŀ	Niitary Dimension	Command Philosophy	Centralised, decentralised, distributed, collective
			Command Structure	Lead nation; Parallel command; Integrated forces: Mixed
			Control Arrangements	Processes; 80Ps; Assignment of force stresources; Doctrine; Training
		Information Dimension	Information Environment Issues	Information availability; Awareness levels:
			Information Exchange Issues	Systems; data; infrastructure
			Information Security	Shared; compartmented; national only
- {	,		Communications	Personat, language; technicate quipment

Summary



- Future operations are likely to involve both allies and nonallies members
- A Coalition C3 system is required to be built, negotiated and implemented
- Identified factors affecting the development of a Coalition C3 system
- Shown different stages of a coalition operation that it will cycle through



Questions

