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Report Documentation Page

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Meeting the NCC challenge

“making network centric capability real”

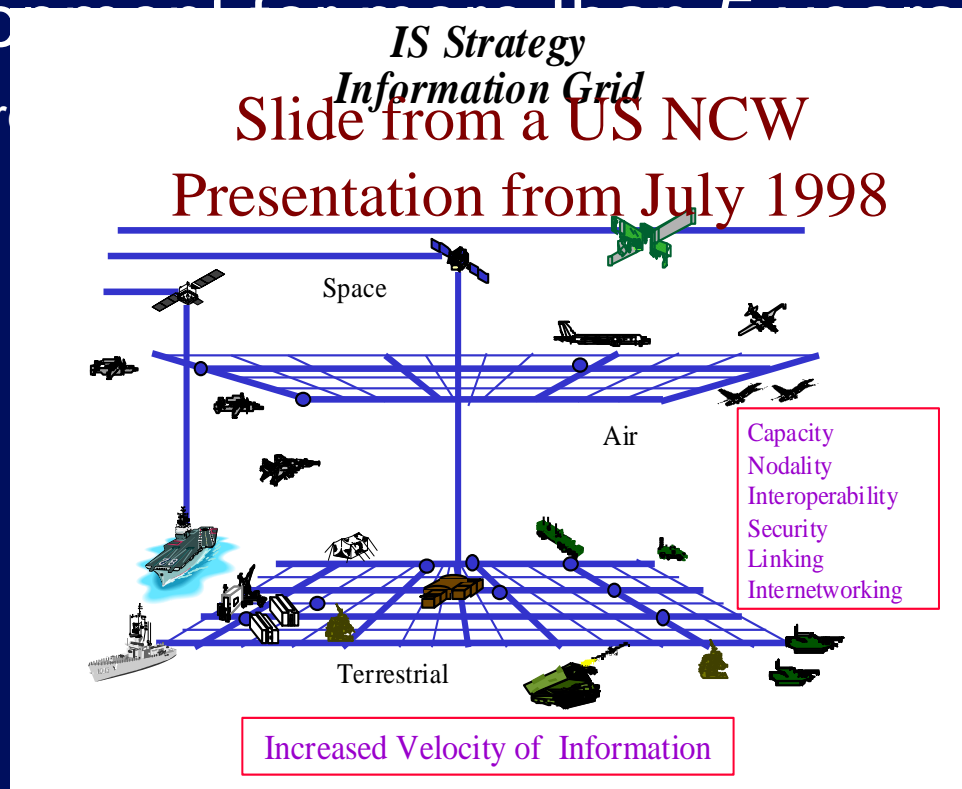
- I will cover two aspects
 - Where the opportunities lie
 - Steps to realise the outcomes - a personal view

Meeting the NCC challenge

“making network centric capability real”

- “Network Centricity” has been a concept in development for some time

– US pr



Meeting the NCC challenge

“making network centric capability real”

- “Network Centricity” has been a concept in development for more than 5 years
 - US presentation on NCW to UK Chiefs of Staff in 1998
- SDR98 referenced the underpinning ideas:
 - *“Although not new, Joint Operations are now more critical than ever”*
 - *“Success demands Joint Teamwork supporting shared military objectives”*
 - *“Fighting forces need the Single Service ethos, but force success demands effective orchestration of individual components”*
 - *“A Joint approach is central to defence activity and requires closer integration across the full spectrum of activity”*

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 - *“A Joint approach is central to defence activity and requires closer integration across the full spectrum of activity”*
- The New Chapter raises the priority to realise these objectives

Section 1

Where the NCC opportunities lie

Where NCC opportunities lie

- Information coherence
 - Shifting the right information between sensors, deciders and effectors
- Capability Integration
 - New concepts in military effect born from network enabled ways of marshalling capabilities
- Orchestration
 - Radical developments in command doctrine

Information coherence

- Flexibility in moving data rapidly and securely
- Effective assembling of information to be readily usable by the right deciders and effectors
- Human interfaces that enhance cognition

Capability integration

- New capabilities by inter-linking existing equipment and force elements (meta-capabilities)
- Rationalisation of inventory to optimise capability overlaps and logistics
- Tying together diplomatic, defence, civil agency and public awareness operations

Orchestration

- New models for command structures
- Command organised by meta-capability?
- Different styles of command decision engaging more inputs

Section 2

The route to realising NCC opportunities

The route to NCC: Information coherence

- Comms plumbing broadly OK
 - providing current projects enter service successfully
- Solve the issues in the interstices between systems
 - Quick fixes drawn from experimentation
- Need for substantial progress on techniques and doctrine for secure sharing
- Information management
 - people who prepare information, manage search/mining tools, steering information between sensors and effectors in military networks

The route to NCC: Capability integration

- Need to reinvent Capability Working Groups to innovate high level capabilities “on top of” current concepts
- The Three ‘E’s
 - Explore the concepts
 - Rapid development through Experimentation
 - Early Exploitation

The route to NCC: Orchestration

- Create a “Doctrine Laboratory”, bringing together
 - Best thinkers in how to manage crises in the round
 - Incisive analysis of implications of science and technology
 - Methods and tools to experiment with high level command issues
 - Simulation and battlelabs to experiment with details in operational command
- Establish “Information Doctrine” as a recognised sub-discipline

From TRICIS July 1998

“Information doctrine”

- ❑ That sub-set of joint doctrine and operating procedures which define how information is exploited & managed eg:
 - how secure information domains are mapped to force structure
 - processes for releasing information to coalition partners
 - processes for developing and disseminating operational estimates
 - forming joint recognised picture
 - which functions are enabled to whom
 - tactics for pushing and pulling information
 - responses to cyber-attack
 - approach to tactical interoperability between environments or nations



A Joint Experimentation Plan

a plank that supports a major part of the NCC waterfront

- Define the concepts to be explored, the supporting experiments, the facilities required and the players
- Illustrative classes of problems to be addressed
 - How must the infrastructure be adapted to allow information to be exchanged horizontally across the battlespace?
 - How to enable data exchanges to ensure that information is accessible at the right place at the right time to the right people?
 - How to re-engineer HQ organisations and platforms to take advantage of new ways of working
- Held as a central part of MoD's capability strategy, tied into capability development and IPTs,

Closing points

- Focus the *Capability Opportunities* of NCC, not solutions
- *Experimentation* is the key technique to discover and implement capability opportunities
- Equipment implications largely to do with *interstices*, will be defined by experimentation
- Critical gaps needing a shift in investment:
 - Security
 - Human interfaces

What we must all do...

NCC will become a reality only by a new model for working emerging between and within:

DECs

IPTs

Customer 2s

Doctrine and policy

Industry manufacturers and solutions generators

Independent defence analysts

The key step now is to establish a new *modus operandi* that enables these communities to interact in a creative and focused way

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