192 Effects-based planning

Mark Round

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Intro

**Effects-based planning**

- **Goals**
  - More effective action
    - Focus on **accuracy** of effect achievement
    - not **precision** of ways
  - More efficient use of resources
    - Controlled thru focus on beneficial ends
    - use of analysts’ expertise
  - Coherence with other instruments of power (dip., econ....)
    - Enable other DP better to support military ops
    - Enable the military DP better to assist other DPs’ ops
Task approach

- **Goal:** specification for IS to support EBP at op level
  - **Precondition:** complete, consistent CONUSE
- **Tasks**
  - review EBP concepts for completeness & coherency
  - derive one coherent lingua franca for EBP
  - define the core scenarios of use for a support system
  - develop a suite of support software with high usability
  - test the suite by conducting a joint-ops-level experiment
  - report on candidate capability req’ts & context of use

Intro
Designing IS-based support for EBP

- Specifying CSCW support requires observation of practice
  - practice helps make cases accountable to process*
- !But new process: no practice yet!
- Solution? breaching experiment’
  - deploy the innovation (e.g. process) ‘in the wild’
  - observe what ad hoc practice it provokes
  - identify resources that users develop to support practice
  - incorporate both into developing spec/design
- Constraint: prototype for provocation & observation

**EBP concepts**

- **US JFCOM** to create S JFHQs by 2005  
  - ONA, SO SA, EBP – not clear how they are related
- **JDC** maintain UK Joint Vision 2020, **UK EBP concept**  
  - forward-looking, process-based description
- **International research interest**  
  - two domains – history/doctrine, technology  
  - concerns – EBO vs. EBT, -ive effects, behaviourism
- **UK JFHQ – lessons identified & practice**  
  - continually evolving, ideal source of IS spec
Review

Terms

- **effect** The physical and/or behavioral change in the state of a system that results from ... [an] action or set of actions. (FCOM)

- **EBP** The process of translating strategic objectives into planned operations across the Instruments of Power that deliver the required effects. (DCC)

- **node** 1. A person, place or physical thing within a system.
  2. A juncture of one or more links that is any combination of people, materiel, facilities and information. (FCOM)
ONA/SO/SA + EBP = ENAR chains (FCOM)

Objective: xxxx
xxx xxx xxxxxxxx
xxx xx xxxxxxx
xxxxx xxxxxxxxxx

Network adapted from http://globalguerrillas.typepad.com/
Review

Effects assessment process (DCC)

Effect/Target Pair

Table:

<table>
<thead>
<tr>
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<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>T4</th>
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<td>E3</td>
<td>?</td>
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Viable?

2nd order effects

Capable?

Willing?

Constraints

Adapted from MN E3 EBO Brief, DCC, May 2003
Conceiving effects – a CoG approach

- Dr Strange’s model* – CoG – CC – CR/CV
- Start with a CoG (key node)
  - it has critical capabilities (attributes of the node) which make it a CoG
  - with critical req’ts/vulnerabilities (influences from other nodes)
- So, adapting JFCOM definitions...
  - node – A person, place or physical thing within a system ... that has influence or can be influenced.
  - effect – A physical and/or behavioural change in the state of a node that can be attributed to an action or effect, or a set or combination of them.

Planning with effects

Aim

"...peace, stability..."

"...respected ANA..."

Effects

Chaos in EnC2 sys supports

Chaos in logs sys commands

Nodes

En logs sys

En C2 sys

En C2 bunker

Actions

B-52 sortie

Supports

Commands

Use
Visualising EBP: Courses of Effect
### STRATHQ Effects and Actions Assessment Table

#### Filter View

**Type:**
- [ ] Strategic Aim
- [ ] Strategic Objective
- [ ] Effect
- [x] Action

- [ ] Unsuitable
- [x] Suitable
- [x] Sub-Optimal
- [x] Currently Unsuitable

#### Create

**Type:**
- [ ] Create Strategic Objective
- [ ] Create Effect / Effect-Tgt Grp
- [ ] Create Action

**Export:**
- Effects Matrix
- PEL
- Current View
- Current View +

<table>
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<th>Id</th>
<th>Type</th>
<th>Name</th>
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<th>Agent</th>
<th>EM</th>
<th>PEL</th>
<th>Priority</th>
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Closing remarks

Task approach

- **Goal:** specification for IS to support EBP (CRs, etc.)
  - *Focus:* Joint Force Headquarters (JFHQ) – operational
  - *Precondition:* complete, coherent CONOPS

- **Tasks**
  - review all EBP concepts for completeness & coherency
  - derive one coherent *lingua franca* for EBP
  - find the core *user goals & activities* needing support
  - develop a suite of support *software* with high usability
  - test the suite by conducting a joint-ops-level *experiment*
  - report on candidate capability req’ts & context of use
Closing remarks

What value in EBP?

- Valuable elements
  - Emphasis on measurement → verifying effectiveness
  - Network-based analysis → insights from network science
  - Representation of other actors → cooperation, etc.
  - Outcome/state-based language → clarity, rigour in DM
  - Explicit rationale (ends-ways-means) → communication
  - Re-interpretation of existing practice → better support
  - → effectiveness of government’s DP
But what is the central thesis of EBO ‘? 

- NOT that the science/technology of...<snip>... provides more precise ways of ‘taking down’ enemy systems.

- But
  
  - That precision of ways (esp. destruction of capability) is not an intrinsically valuable end – what matters is the accuracy with which we achieve desired changes in thought or behaviour.
  
  - That adopting this approach allows us to expand our repertoire of ways, and (therefore) improves our ability to select options that are effective & efficient at achieving policy ends.
  
  - That the adoption of this philosophy will require a change in the language used in Western powers to describe intentions and actions in operations.
A language for planning

- No 'end state'
- Outcome responsibility
- Mechanisms secondary to plan; can be from different models
Issues

- How could the solution be instantiated?
- Is this approach scalable?
- Does it provide an effective means of developing and communicating rationale?
- Does it support users comprehending the complexity of effects?
- What are the fundamental components? What must be in place?
- Does this framework allow all interested parties to collaborate effectively?
- Is it rich enough? Are all parts of the framework necessary?
- How manageable would such a product be for a real operation? Is this complexity already a part of operational planning?
- Might some effects be grouped into clusters, with collective influence on other effects/actions?
How?

Some questions remaining

- What purpose planning?
  - Planning as a process specified in doctrine and SOPs;
  - Planning as an example of expert decision-making;
  - Planning as a special kind of design;
  - Planning as a complex group activity.

- Measuring success — what, how?

- Understand interactions between EBP &
  - decision-making styles,
  - organisation structure (HQ+),
  - equipment, etc.
8 Q's for EBP

1. What has happened?
2. What direction have I been given and why?
3. Who are the main Actors, what are their Strategic Aims & Key Nodes?
4. What Attributes of each KN make it key for this Op, what Effects in these do we (not) want, & how will we measure success in this?
5. What Actions (by any actor) might support or impede these effects?
6. What Influences on each KN might support/im pede each Effect?
7. What Effects in these nodes would affect their influences on the KN?
8. When and where do these Effects and Actions take place?
Effects Rationale

- COEs: COAs
- Blue, Red, Green (White) Intentions
- Iterative ‘wargaming’
- Undesired Es
- Coercion
RE214 Operational CBM Project

...addressing the need for enhanced support for Planning, Command & Control and Logistics at the Strategic and Operational levels of command and in order to improve operational effectiveness...
Operational CBM Project

- **Purpose:** greater operational effectiveness
- **Goal:** specifications for enhanced IS support
- **Focus:** planning, command & control, logistics at strategic and operational levels of command