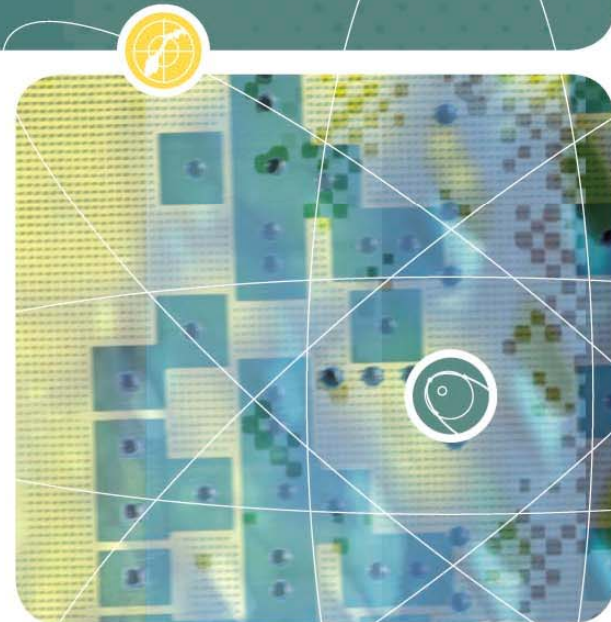


A Proposal for a Norwegian Defence Conceptual Framework

– concept development and the relation to long-term defence
planning.

**26th August 2008 at
ISMOR25 by Mr. Rune
Stensrud**



Suggested format of the presentation

- Introduction to military Concepts and Concept Development
- A Proposal for a Norwegian Defence Conceptual Framework (NDCF)
 - *concept development and the relation to long-term defence planning.*



Survey and Background



FFI Project METEK

- Scope of Work

- **Time frame** 2 years (1.1.06–31.12.07)
- **Project leader** Rune Stensrud/FFI Analysis
- **Total effort** 3FiÅ
- **Implementation:** Co-operation with Industry (Teleplan);
use of competence in the NoD community
- **Steering Board:** Norwegian MOD IV-1, FSS, FOL, KNM T,
TRADOK, LUKS
- **Scope of work:** FFI Project METEK is proposing a
Methodology of concept development

FFI Project METEK

- Background and Objectives

- Norwegian Defence (NoD) has introduced Concept Development as a supplement to traditional developmental activities.
- Best practices of operational experimentation are well established in NoD ...
- ... but the place of concepts within the strategic planning process or the role of concepts within the acquisition process is not fully stated.

- ➔ **Assist Norwegian MOD in the process of linking concept development and experimentation**
- ➔ **Aid Norwegian MOD in the process of mapping concepts onto the Defence Capabilities Framework**
- ➔ **Present a proposal for a Norwegian Defence Conceptual Framework** (focusing on organization, process descriptions, enterprise-models and planning)
- ➔ **Aid the Norwegian Defence Study (Forsvarsstudie 07)**



Definitions and distinct views of concepts

Definitions

- A **concept** provides foundation for achievement of an effect; i.e. an idea of how to solve a problem or create a certain effect*.
- A **military concept** is the description of a method or scheme (ways) for employing specific **military capabilities** (means) in the achievement of a stated objective (ends).**
- **Concept development** is a process to verify ideas of how to create an effect, with a view to **future** realization.***
- A **capability** can be defined as the ability to produce an effect.

* NATO Code of Best Practice Long Term Defence Planning

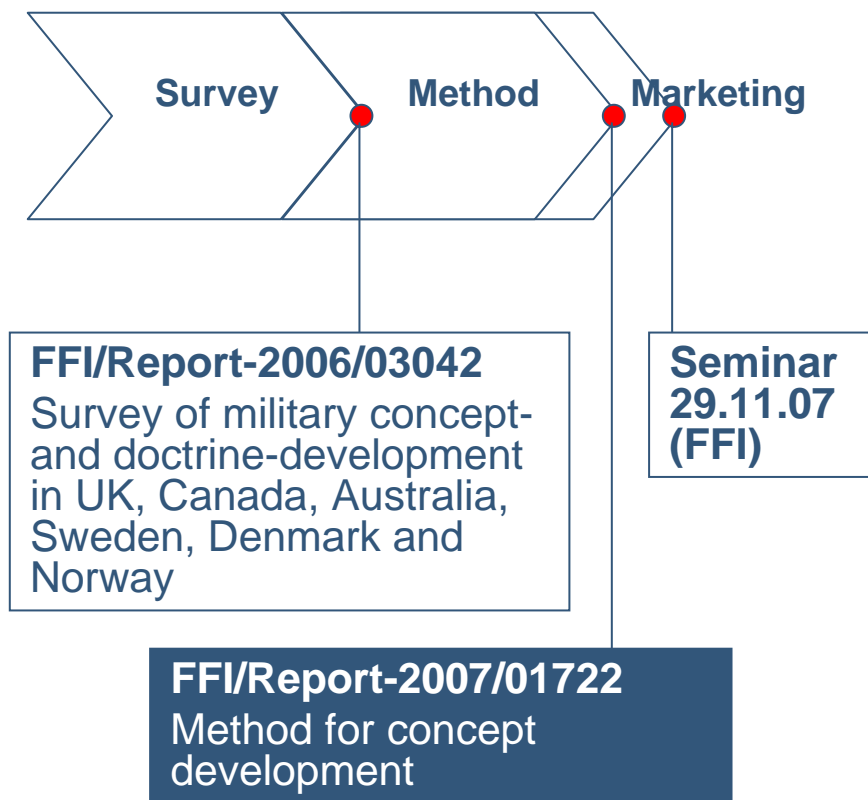
**US Joint Capstone Concept, version3

*** NATO ACT dir 80-7



A Proposal for a Norwegian Conceptual Framework

Results (1 of 3)



Reports:

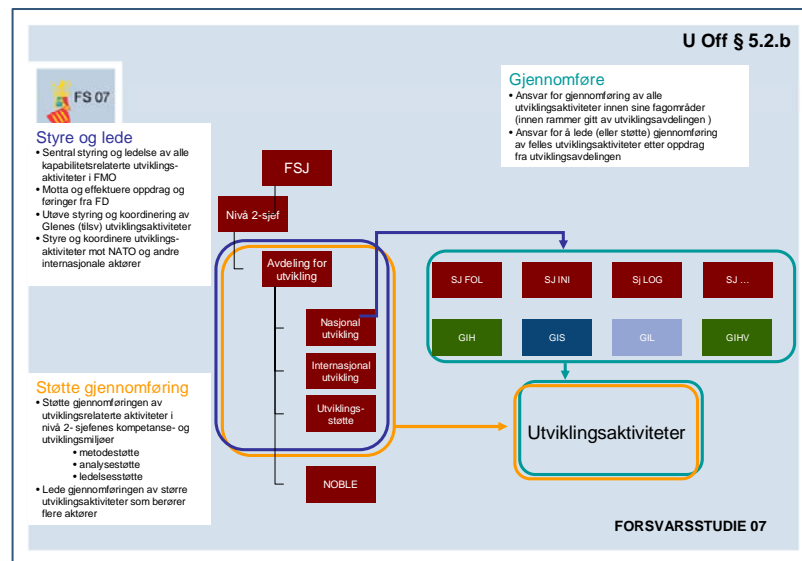
- Visiting Development, Concepts and Doctrine Centre (DCDC), MOD Shrivenham, Swindon, UK, 5. juli 2006
- Visiting Högkvarteret, Försvarsmakten, Stockholm, Sverige, 6. september 2006
- Participating on NTNU's "Concept Symposium 2006"
- Visiting Forsvarskommandoen, København, Danmark, 9. oktober 2006
- CDE conference, Athen 2006

Results (2 of 3)

- **METEK project has assisted main stakeholder Norwegian MOD**
- **... and Norwegian Chief of Defence (Defence White Paper 07)**
- **FFI will continue to be a active part following up this process**

"In my opinion this has been an exemplary project representing flexibility (and agility) according to the process i.e. good contact between FFI and main stakeholder, and regarding outcome"

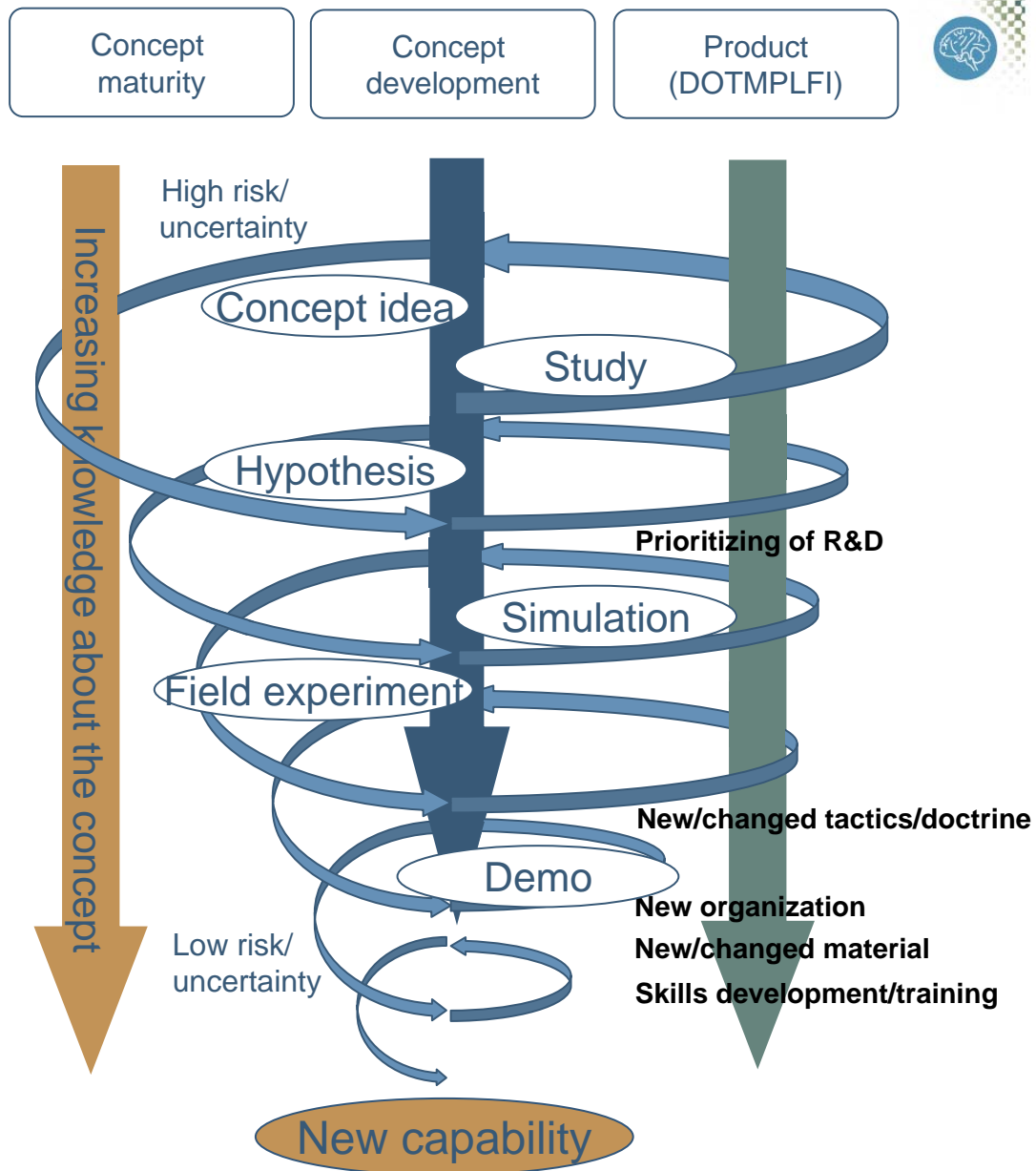
results from the user survey



Results (3 of 3)

The main elements of the **Norwegian Defence Conceptual Framework** are:

- Definitions
- Concept Hierarchy
- Capability Framework
- Organization
- **Process descriptions**
- Management tools





Concepts and Time



Concepts and Time

Capability Gap Solution Requirements Solution Sustainment Withdrawal

Need

Requirements

Acquisition

In Service

Disposal



Development concepts
- *Analytical* concepts
(future)

Established (applied) concepts
- Current best practice
- Doctrine
- CONOPS
- CONUSE
(current)

Historical concepts
(past)



Motivation for Concept Development



Why military Concept Development?

A need for transformation of military forces to adapt to future Change – reduce uncertainty?

- Rapid changes in military operations may have impact on which methods are relevant and cause current solutions to be ineffective
- **Threats**
 - From static to dynamic threats
 - From episodes to continuous conflicts
 - "The Missing Threat"
- **Missions and Tasks**
 - Counterinsurgency to Home Security
 - Increasing needs within Peace Keeping
 - The Need for flexible and adaptive capabilities
- **Relevant partners for co-operations**
 - Both nations and organizations (authority, IO, NGO, industry, local government)

Why military Concept Development? (contin.)



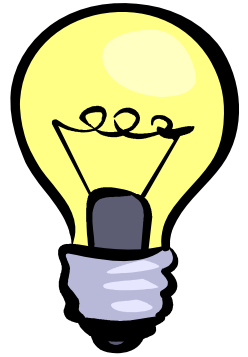
- **Strategic** view (ends)
 - Globalization -> Global focus, "Out-of-area"
 - Economical, social and political arenas (PMESII) -> coordination and different instruments of power (DIME)
 - **Technology** (information and communication technologies)
 - Increased possibilities to share information
 - Increased possibilities to interaction
 - Need of competence, expertise and skills
 - Procurement regime
 - **Economics**
 - Balance
 - **Need of increased efficiency**
- > Need for new/modified capabilities
- > Request for a higher rate of Change – incremental processes too slow, i.e. the result is increased risk or strategic gap
- **A need for Concept Development**



The Purpose of Concept development

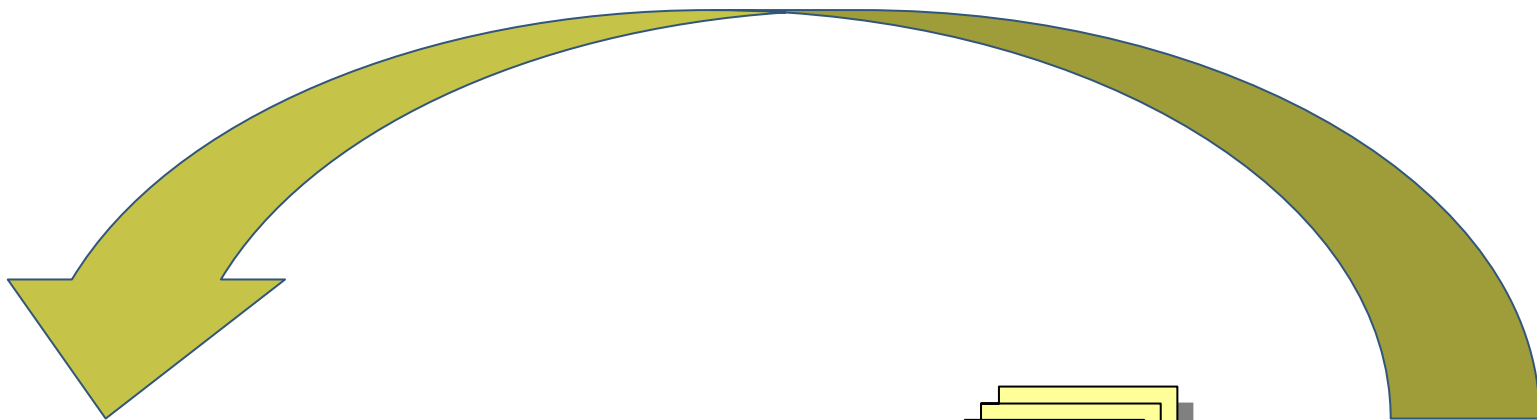
- Address processes of change
- Reduce risk
- Increase operating efficiency
- **Reduce cost**

- A concept is an **idea!**
 - uncertainty connected to whether the idea is realizable, practicable, feasible ...





The Process description



A High-level Concept may be the directing basis (Strategic Guidance) for the NoD Defence Study

Long Term Defence Planning (Defence Study)

Concept Development

New Concept identified needing development

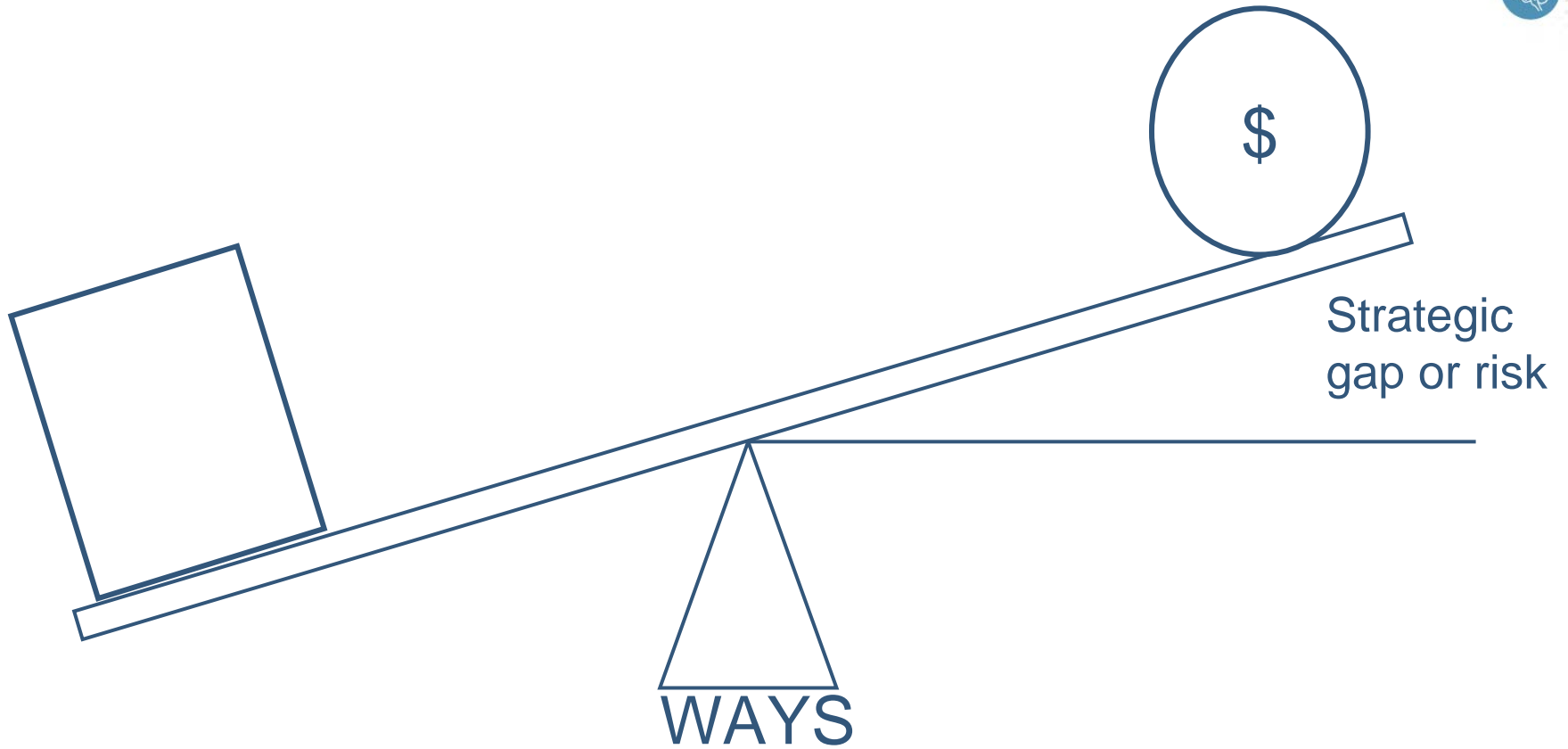
Master Questions identified

Concept Development

Capability

ENDS

MEANS



Based on "The Military Budgeting Process: An Overview", Le Roux, 2002

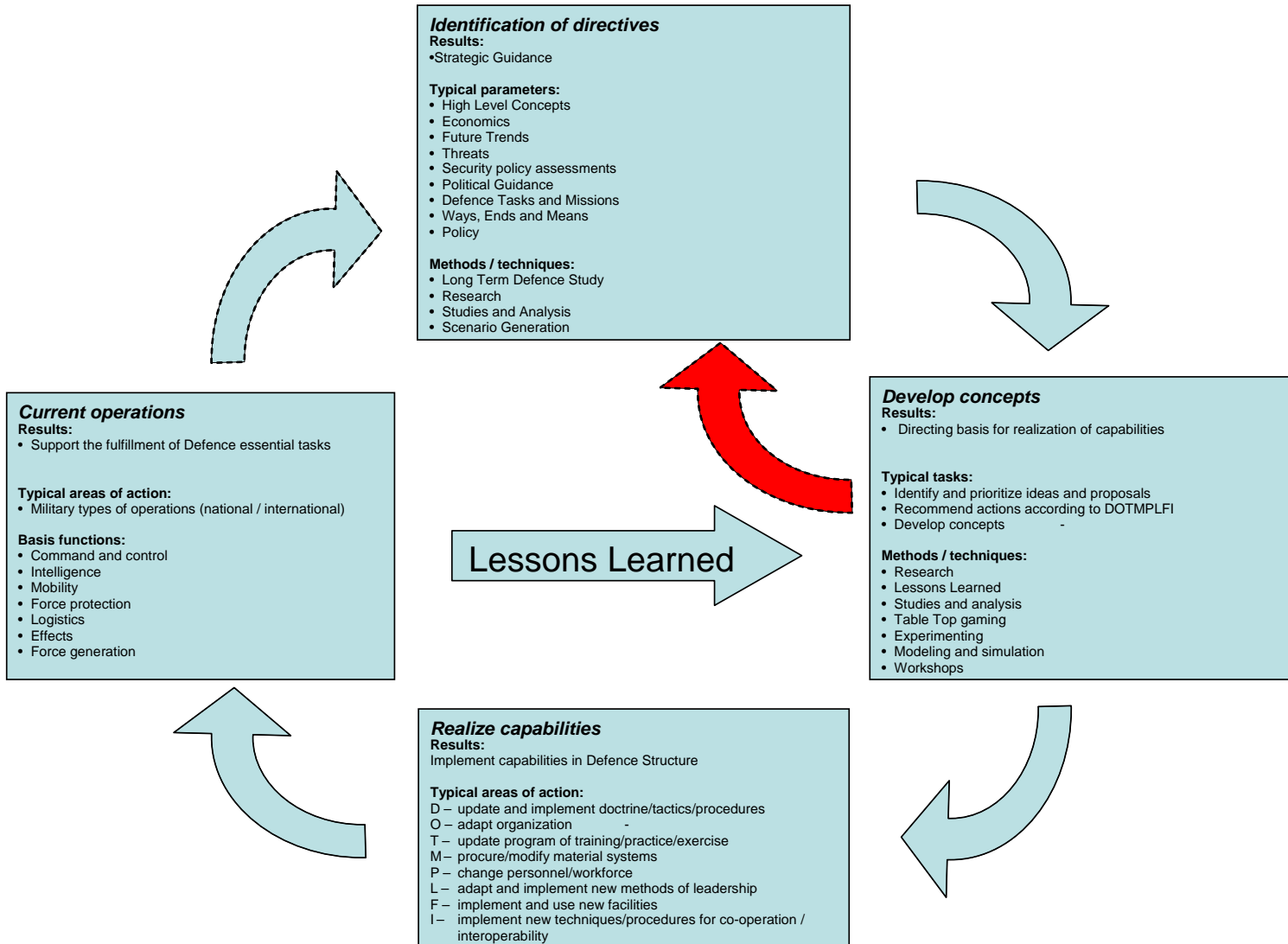


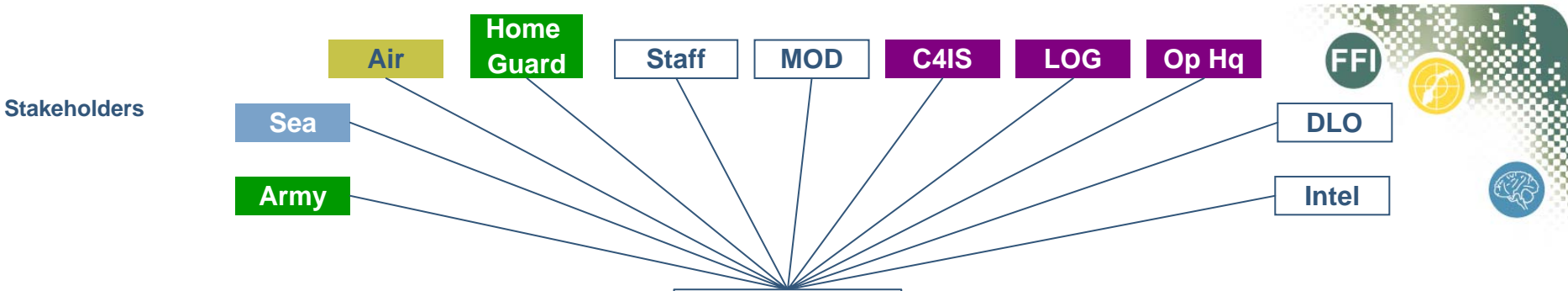
End of Presentation

FFI turns knowledge and ideas
into an efficient defence



Extra slides



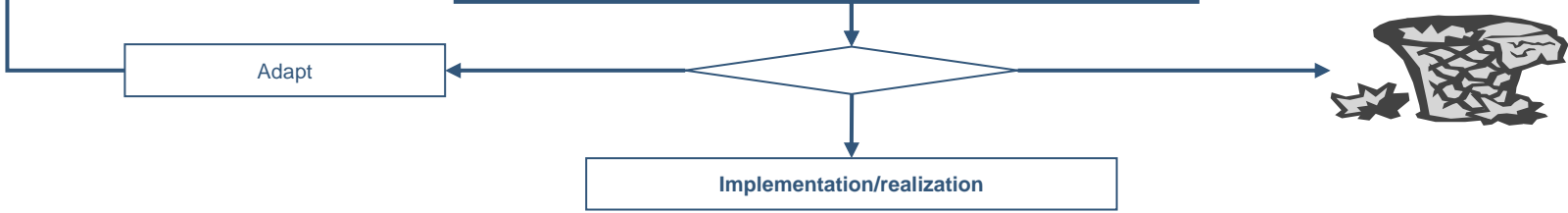


Concept development

Develop Concept starting point may be an idea which possibly can contribute to increase the ability of Defence adapting to changed circumstances, whether based on a new threat or opportunity.

- Functional components of a capability:**
- D – adapt doctrine/tactics/procedures
 - O – adapt organization / force structure elements
 - T – update program of training/practices/exercises
 - M – procure new/modify material systems
 - P – change/adapt competence/skills/program of education/force gen.
 - L – implement / adapt concepts of leadership/ education of leadership
 - F – implement and use new/mod. of buildings/ training facilities
 - I – implement new techniques/procedures for co-operation/ interoperability

- Methods**
- Research
 - Studies and (OR) analysis
 - Workshops
 - Table Top gaming
 - Modeling and simulation
 - Experimentation
 - Lessons Learned etc

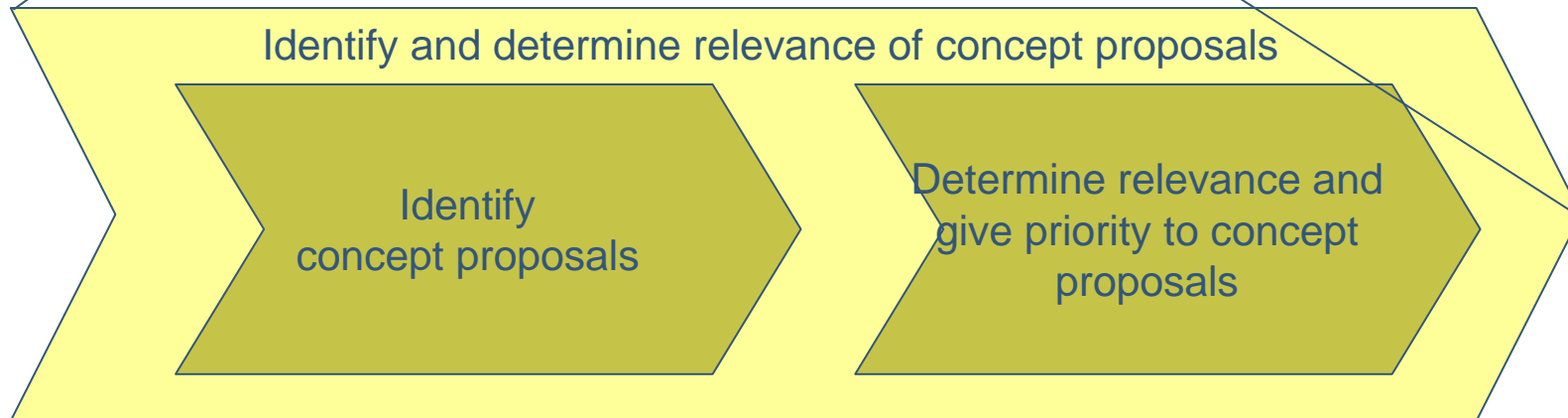
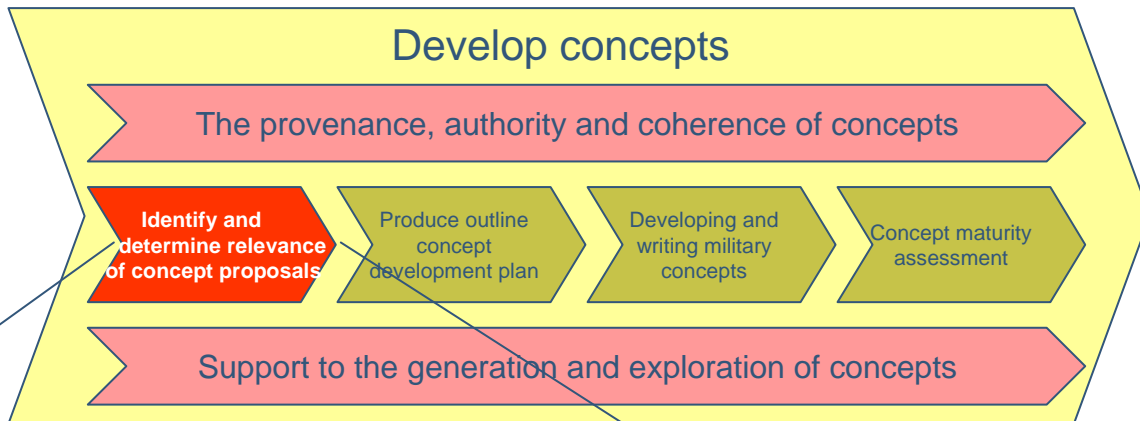


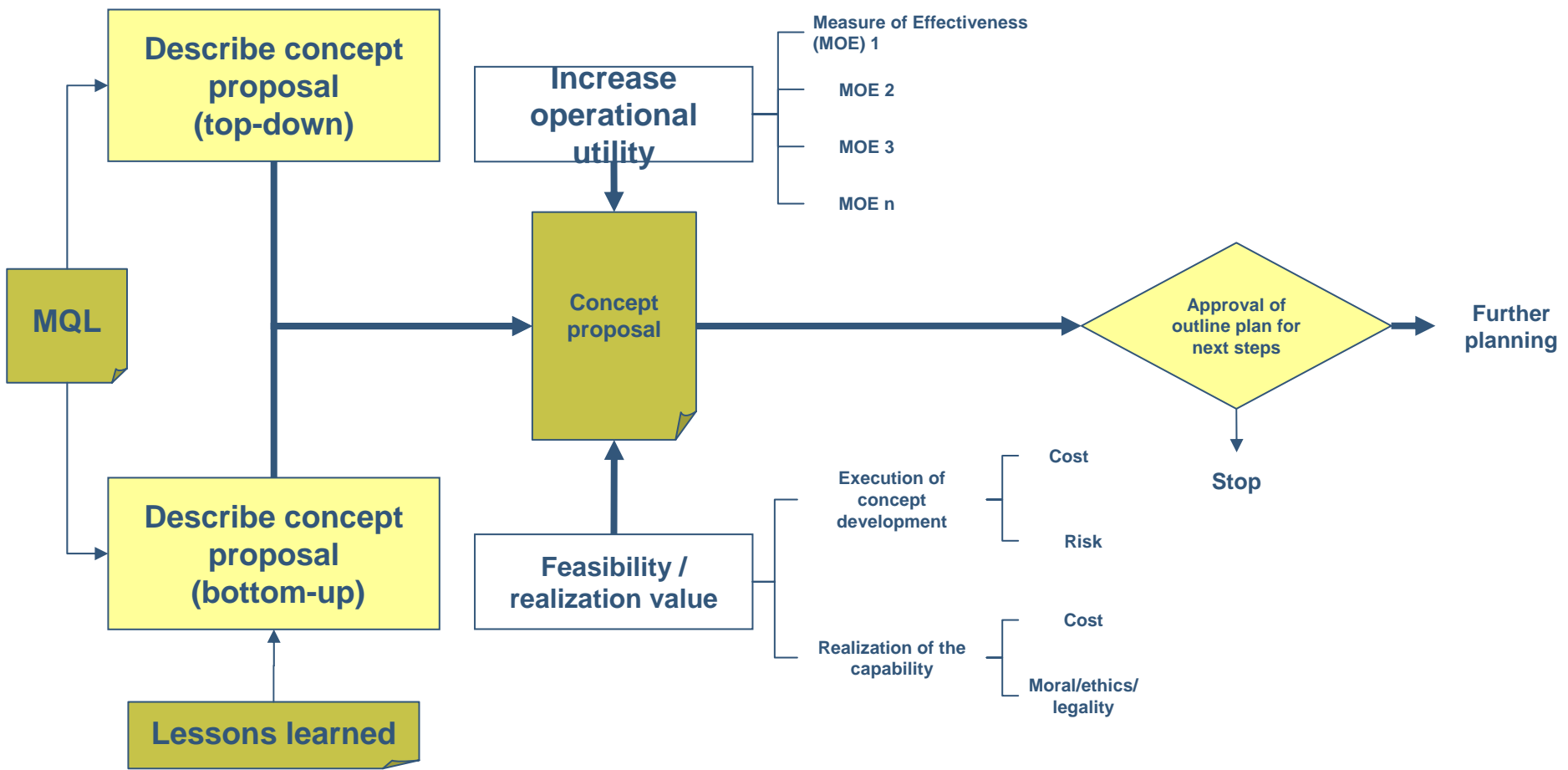
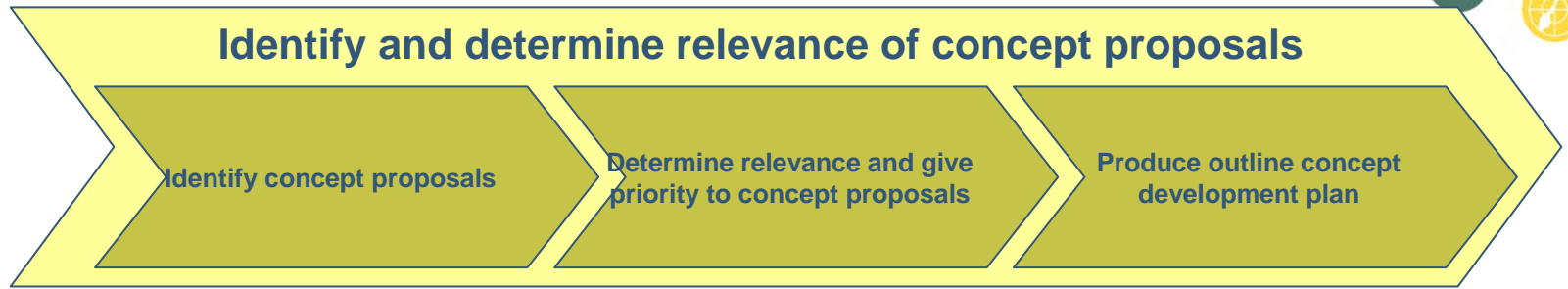
Experimentation Priorities

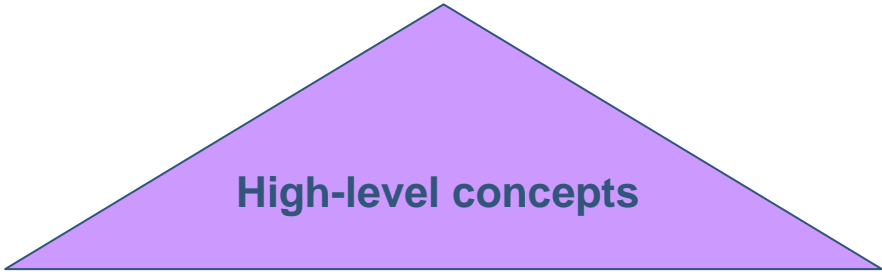
High Level Experimentation Questions



1	Future Concepts of C2	What future concepts of command and control will achieve decision superiority and rapid effect in the Joint and Multinational battlespace?
2	HQ Orgs & Structures	How can we better deliver optimal effect through evolving organisation and structures of HQs within the battlespace?
3	NEC	How can decision superiority and tempo be enhanced through the application of Network Enabled Capability?
4	MN C2 & Interop	How do we apply concepts for command and control to a multinational/coalition environment to ensure interoperability?
5	Information Exploitation	How best do we develop operational information capabilities, in order to provide decision makers with timely and appropriate information?
6	Co-ord & C2 of ISR assets	How do we co-ordinate and command ISR assets to best effect?
7	Co-ord of Joint Fires	How do we co-ordinate and command joint fires at our disposal in order to synchronise and concentrate the desired effects?
8	Airspace Management	How do we improve the co-ordination of joint airspace management and planning?
9	Structure of Jt/ MN Battlespace	How are we to best organise forces and component HQ responsibilities to exploit emerging technologies and concepts for the conduct of future ops?
10	Combat ID	What are the essential elements of SA, TTPs and target identification required to optimise CID and how are they to be incorporated into mil capability?
11	Air Defence	What are the joint concepts, doctrine and capabilities for comprehensive AD for deployed/expeditionary forces?
12	Joint Logistics Capabilities	What are the essential capabilities required for joint logistics, and how do we best deliver them??
13	Common Log Picture	How do we best portray the Joint Logistics Picture and what decision support tools are required?
14	Op Medical Care	What are the essential capabilities required to provide operational medical care, and how do we deliver them?
15	People Tracking	How do we improve the ability to locate and mange people and their skills in the battlespace?







High-level concepts



Strategic
Guidance

Operational
feedback

Functional concepts

C2	Intel	Mobility	Protection	Logistics	Effect	Force Generation
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Operational concepts	Op concept # 1						
	Op concept # 2						
	Op concept # 3						
	Op concept # 4						
	Op concept # 5						
	Op concept # 6						
	Op concept # n						



Functional concepts

C2

Intel

Mobility

Protection

Logistics

Force Generation

Operational concepts

Op concept # 1

Op concept # 2

Op concept # 3

Op concept # 4

Op concept # 5

Op concept # 6

Op concept # n

Developmental-
concept

Analytical-
concept

Developmental-
concept

Developmental-
concept

Developmental-
concept

Command and control

Logistics

Effect

Mobility

Protection

Intelligence

Generation and maintenance of force components

FFI

Current Operations

