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Defensie

Enterprise Architecture for the Netherlands Department of Defence

Open Group Brussels April 2004

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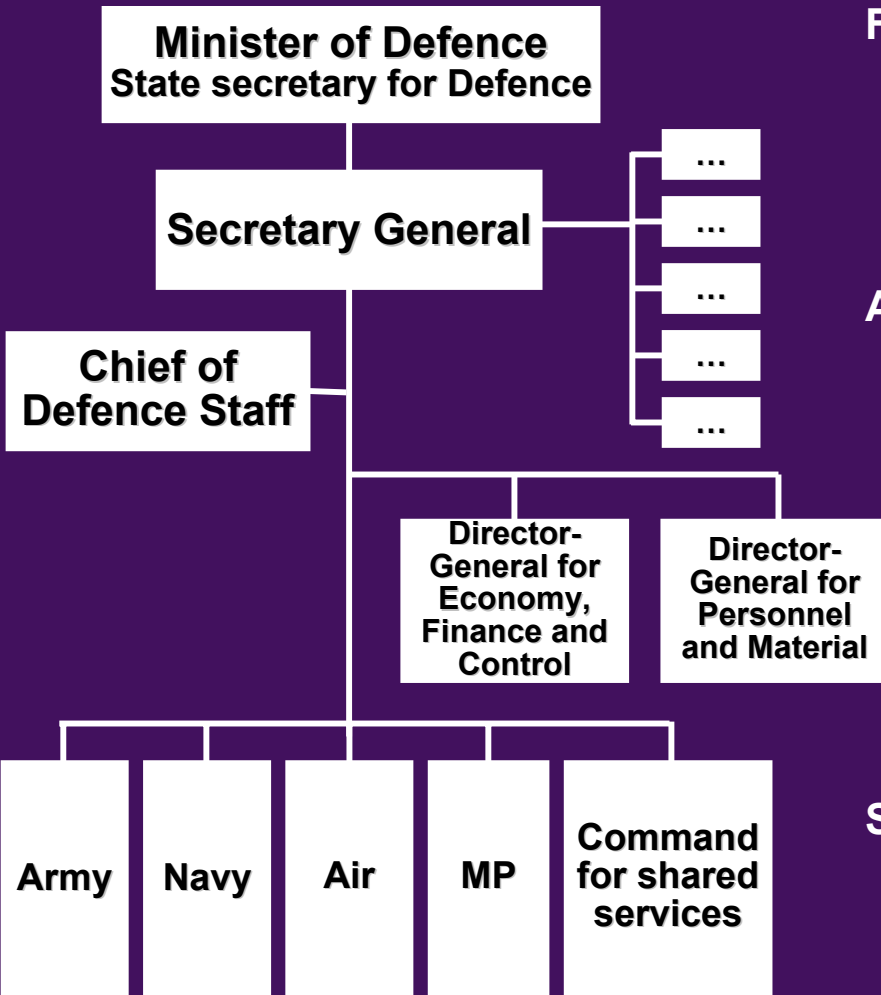
Agenda

Background on the Department of Defence

The Enterprise Architecture

Lessons learned

Context and current organization

Minister of Defence
State secretary for Defence

Secretary General

...

...

...

...

...

Chief of Defence Staff

Director-General for Economy, Finance and Control

Director-General for Personnel and Material

Army

Navy

Air

MP

Command for shared services

Facts
- 72.000 employees
- Joint & combined operations
- Multiple locations (NL and abroad)
- Multiple cultures

Ambitious goals
- More international operations out of area
- Better deployability, interoperability
- More transparency, better accountability
- Further staff reduction (2006-60.000)
- Standardized processes and systems instead of ''stovepipes" per force

Situation
- Cost cutting is no longer an option
- ERP implementation planned

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Ambitions

Better deployment ratio with ICT improvement

From an supportive to an enabling information infrastructure

Business-driven ICT investments

Ambitious ERP project

Staff reduction: more efficiency

Are we ready for

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We need an enterprise architecture!

First we should have a better and common vision on

- Ambitions
- Governance
- Consequences
- Risks

To reach ambitions

- We need another approach
- We focus on commonality, not on differences
- We restructure our information infrastructure to implement industry solutions (ERP)

Foundations for the project DIVA
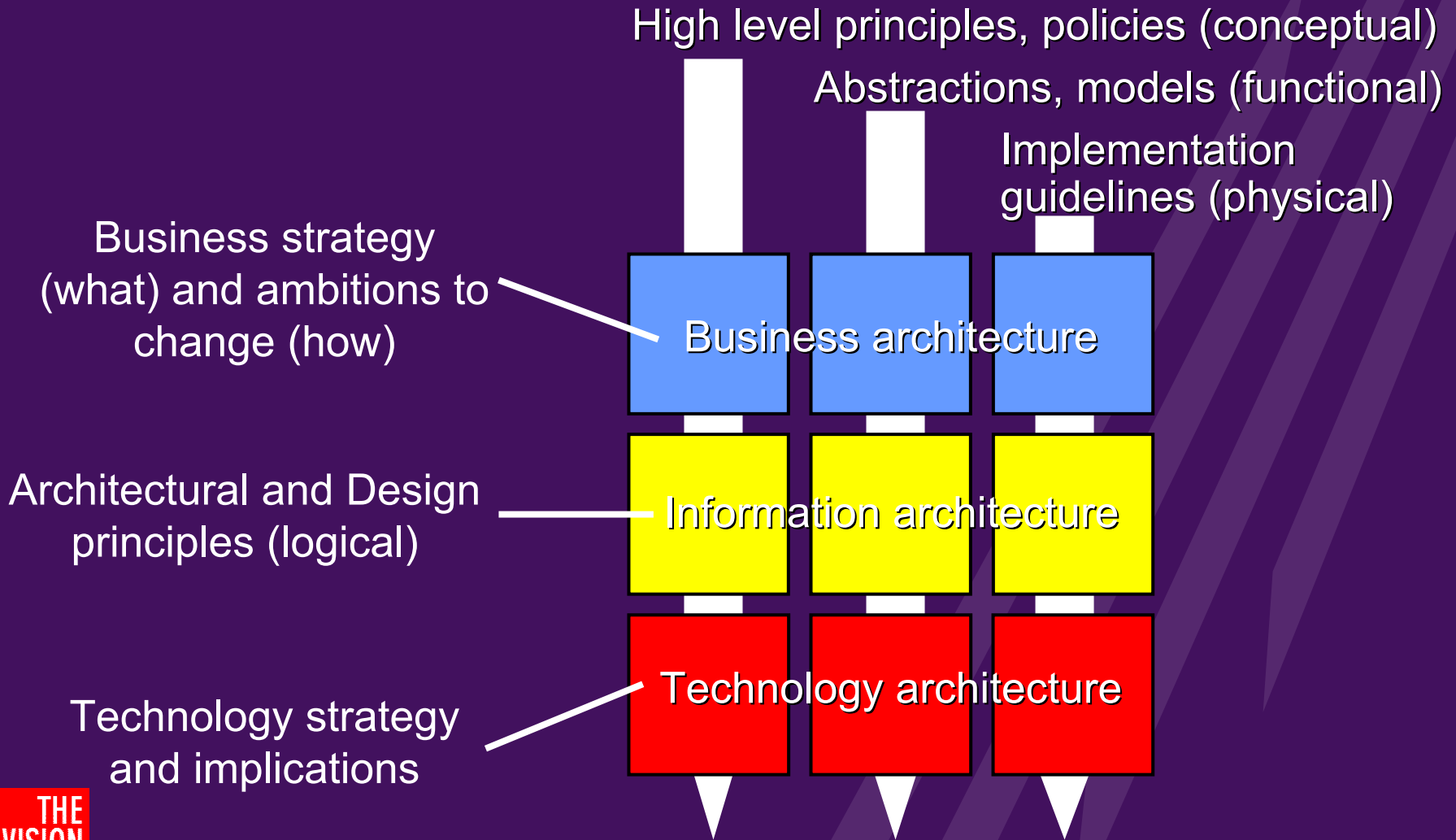## Defence Information Vision and Architecture

- As complicated as needed, but as simple as possible

- Stakeholders involvement

- Involve independent expertise

- Use fixed time boxes for the project

- Let business goals be leading

Why should it be business-driven?

1. To demonstrate clearly that all efforts can be linked to the business strategy and the business drivers

2. To explain that the architectural goal is derived from the current and future defence environment
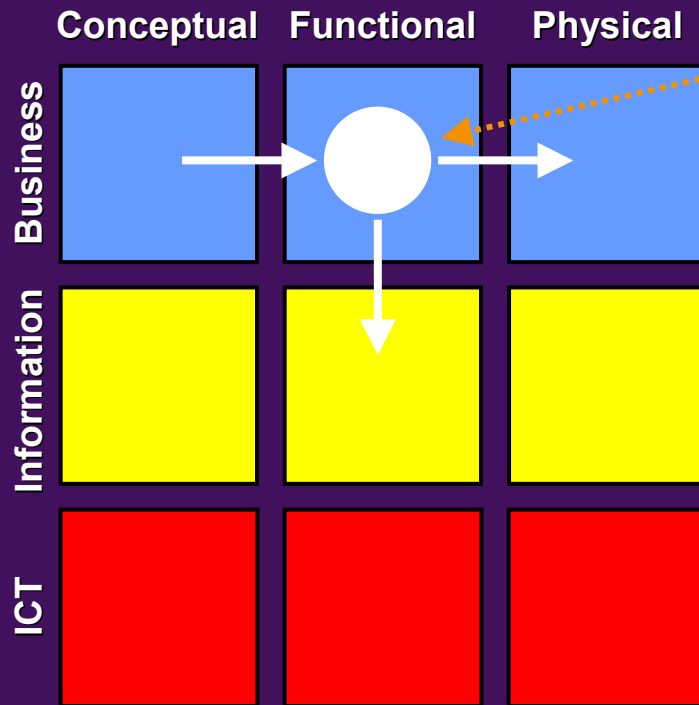
   So that politicians, military and civil management and lines of business will understand what it is all about

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Simplicity: a nine field framework

High level principles, policies (conceptual)

Abstractions, models (functional)

Implementation guidelines (physical)

Business strategy (what) and ambitions to change (how)

Business architecture

Architectural and Design principles (logical)

Information architecture

Technology strategy and implications

Technology architecture

Defensie

Business architecture: business process

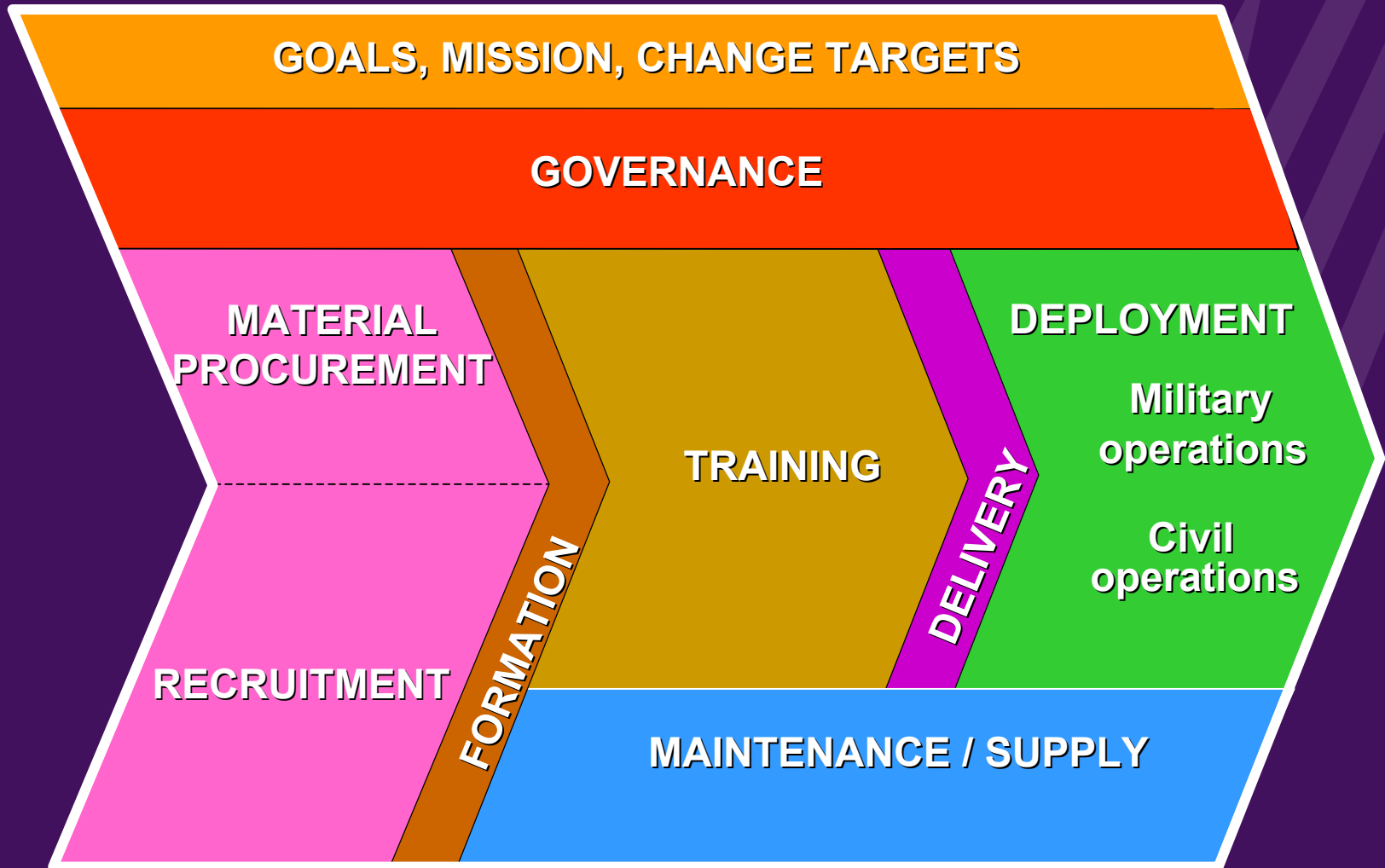Conceptual Functional Physical

Business

Information

ICT

Common aspects found in <u>business processes</u> of Defence

- Developed in co-creation with stakeholders
- To increase acceptance of future design of organization and ICT

Common view on processes

Resulted in a common value chain used as a blueprint for the design of the organization
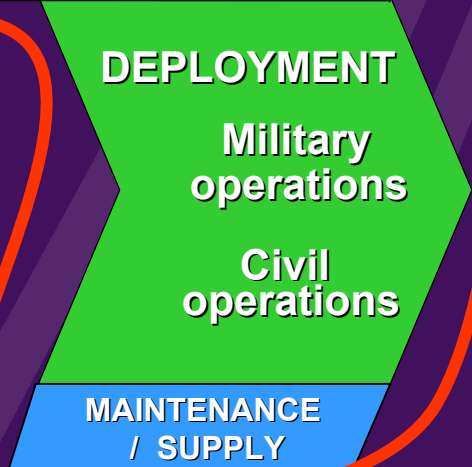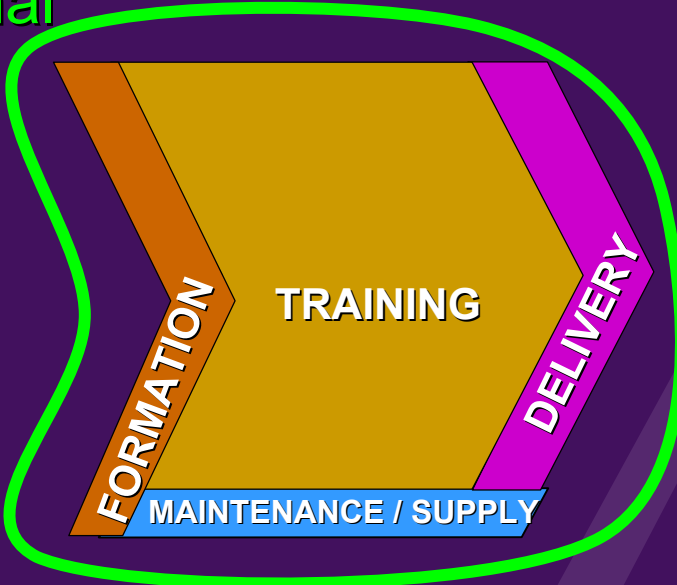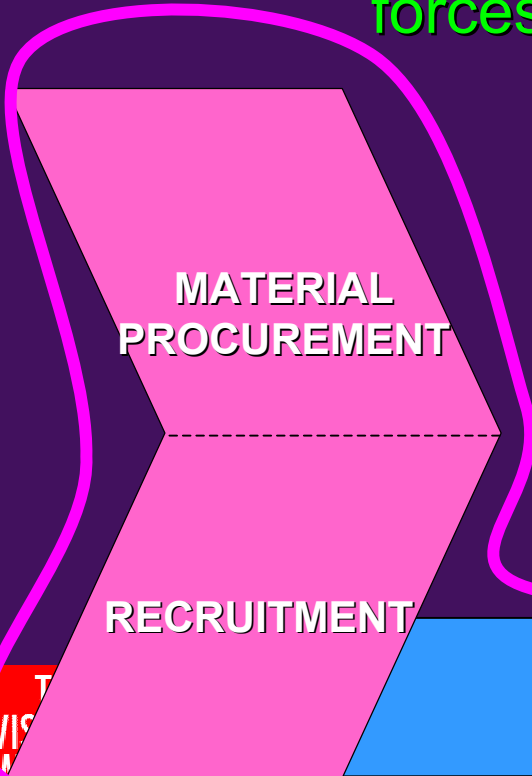
Defence processes in common value chain

GOALS, MISSION, CHANGE TARGETS

GOVERNANCE

MATERIAL PROCUREMENT

DEPLOYMENT

Military operations

Civil operations

TRAINING

FORMATION

DELIVERY

RECRUITMENT

MAINTENANCE / SUPPLY

Processes as basis for organizational blueprint

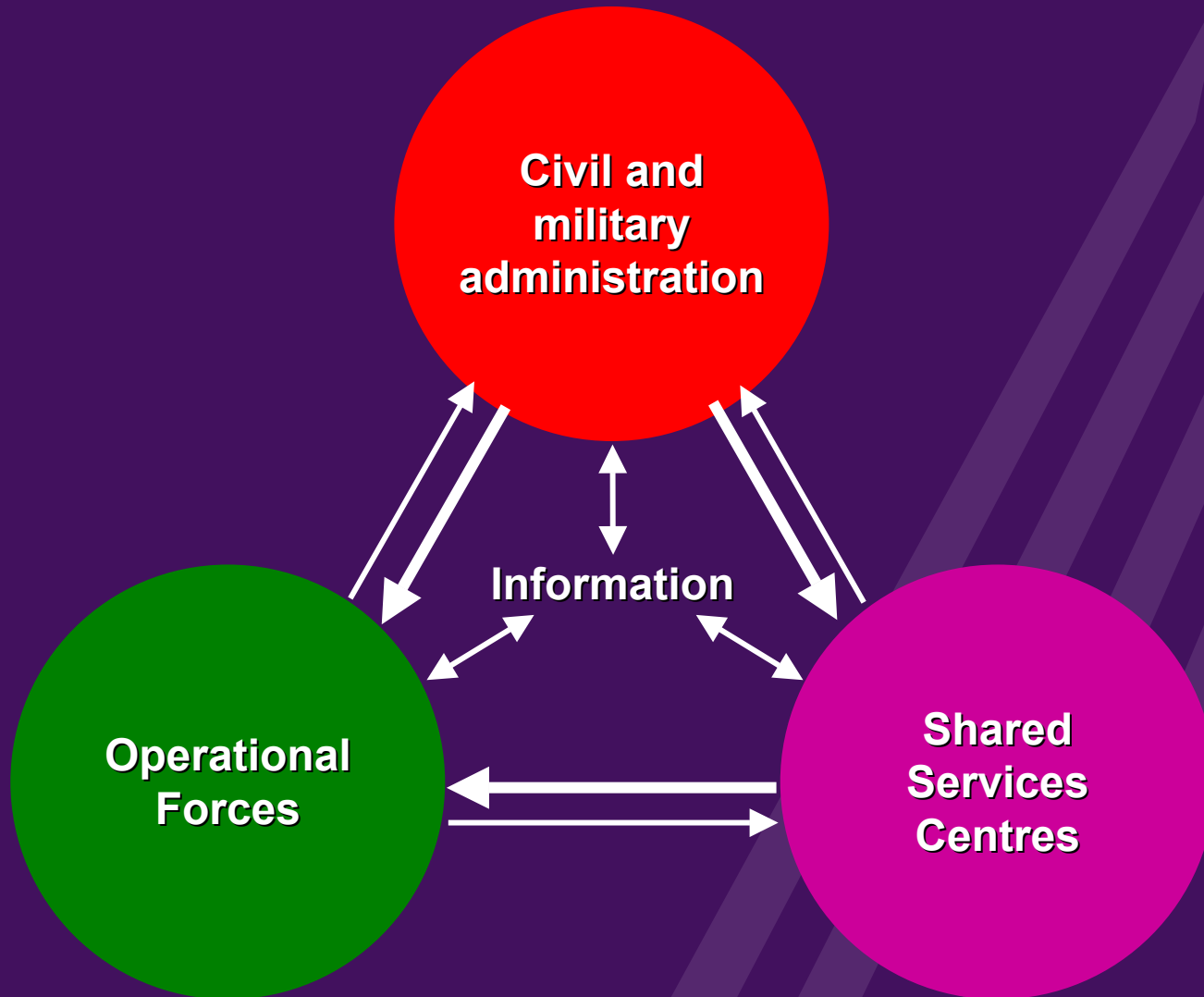**Civil and military administration**

Operational forces

GOALS, MISSION, CHANGE TARGETS

GOVERNANCE

DEPLOYMENT

Military operations

Civil operations

MAINTENANCE / SUPPLY

FORMATION

TRAINING

DELIVERY

MAINTENANCE / SUPPLY

MATERIAL PROCUREMENT

RECRUITMENT

MAINTENANCE / SUPPLY

Shared service centers

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Basis for new organization

Civil and military administration

Information

Operational Forces

Shared Services Centres

Information architecture: service orientation

	Conceptual	Functional	Physical
Business			
Information			
ICT			

Business processes are supported with common <u>information services</u>

- A service
    - Is a logical concept, deducted from the generic process model
    - Unique in functionality, depends on other services
    - Can support multiple processes
    - Has one owner

<u>Corporate data model</u> is part of the information architecture

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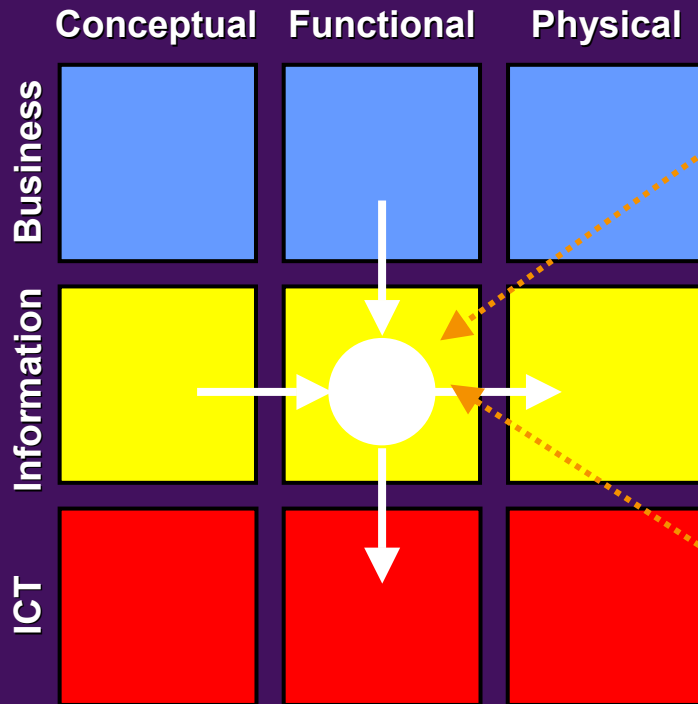
Information services model: blueprint

Policy services	Adaption services	Military Command & Control

Production management services

Data management services

ICT Infrastructure services

Based on:

- Vision
- Business goals
- Business processes

Each area of the services model has its specific features:

- Level of predictability, specificness, life cycles, dependencies
- Filled in with Commercial, Military or Departmental Of The Shelf applications, or with self made applications

Information services model

Policy services

Adaption services

Military Command & Control services

For Military Command & Control specific state of the art ICT will be used, aligned with NATO requirements. Distinctive capacity.

Production management services

**BPM and capacity management support to change Dutch defence with new weapons, new (peacekeeping) missions**

Production services will be implemented with of the shelf ERP applications for HRM, Logistics and Finance. 'Any' industry solution will do.

Data management services

Management of core data for data used among different services

ICT Infrastructure services

Integration, Archive, Network, Communication, Security, System mngt, Office (base for Technical architecture)

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Information architecture: service orientation

|	Conceptual	Functional	Physical
Business			
Information			
ICT			
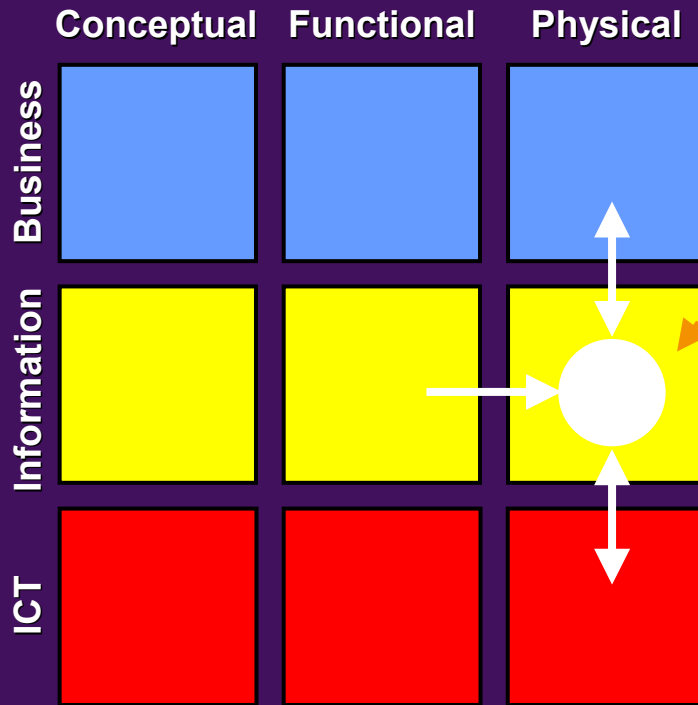
A combination of services is defined as an <u>information system</u>

- Useable for specific situations:
  - Static, Deployed or Mobile operations,
  - Classified or secret
- A set of building blocks and for showing how the building blocks fit together

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ICT architecture: enabling infrastructure

|	Conceptual	Functional	Physical
Business			
Information			
ICT			
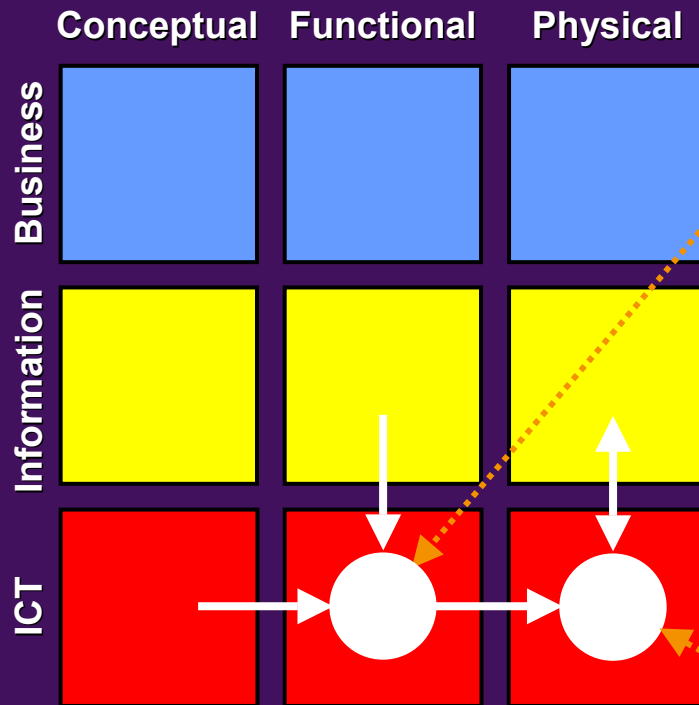
Technical picture of the information services

- The ICT infrastructure can be a major cost driver
- Aim is to reduce the number of infrastructure components
- The design of the infrastructure is based on a vision on how Defence wants its infrastructure to be used

Selection of standards and ICT products is based on clear criteria:

- Open standards, compatibility with current infrastructure, NATO requirements, no supplier dependency, following trends

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Architectural Development Cycle
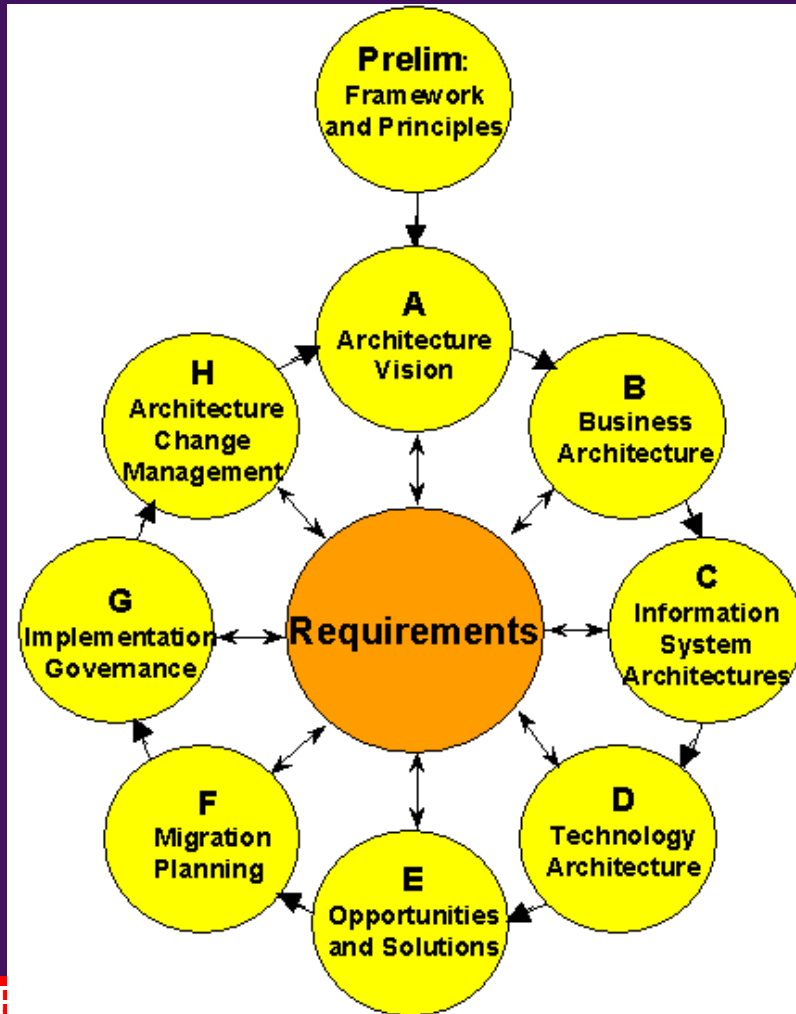
1st cycle: 5 months

3-5 fte involved

- Governance: took another 4 months to complete

2nd cycle: 6 months

4-6 fte involved

- More detail, more participation in projects

3rd cycle: 2004

6-8 fte involved

- Migration towards an ERP and EAI based information infrastructure (takes 2 to 8 years to complete)
- All changes are based on the architecture

# Using the EA in the transformation

Governance

- All business and ICT projects should respond to the architecture
- The corporate change manager $\approx$ the corporate architect $\approx$ the budget owner for all changes $\approx$ main advisor to executive board

Readiness

- The enterprise architecture is always changing (maturing), but always workable
- External auditors verify the usefulness

Commitment

- Involvement of all stakeholders (Air, Sea and Land, military and civil management)
- Communication is essential to reach a constructive, pro-active attitude by change managers and information managers
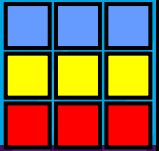
Lessons learned

Simplicity

- The framework of nine fields is a strong logo

Business driven

- The first objective is to improve the business, not the architecture

Governance

- Control of budgets

Leadership

- Define and communicate architectural goals and keep on track

Attitude

- Co-creation rather than knowledge monopoly

Contact details

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