IBM Cognos Aerospace and Defence Special Interest Group
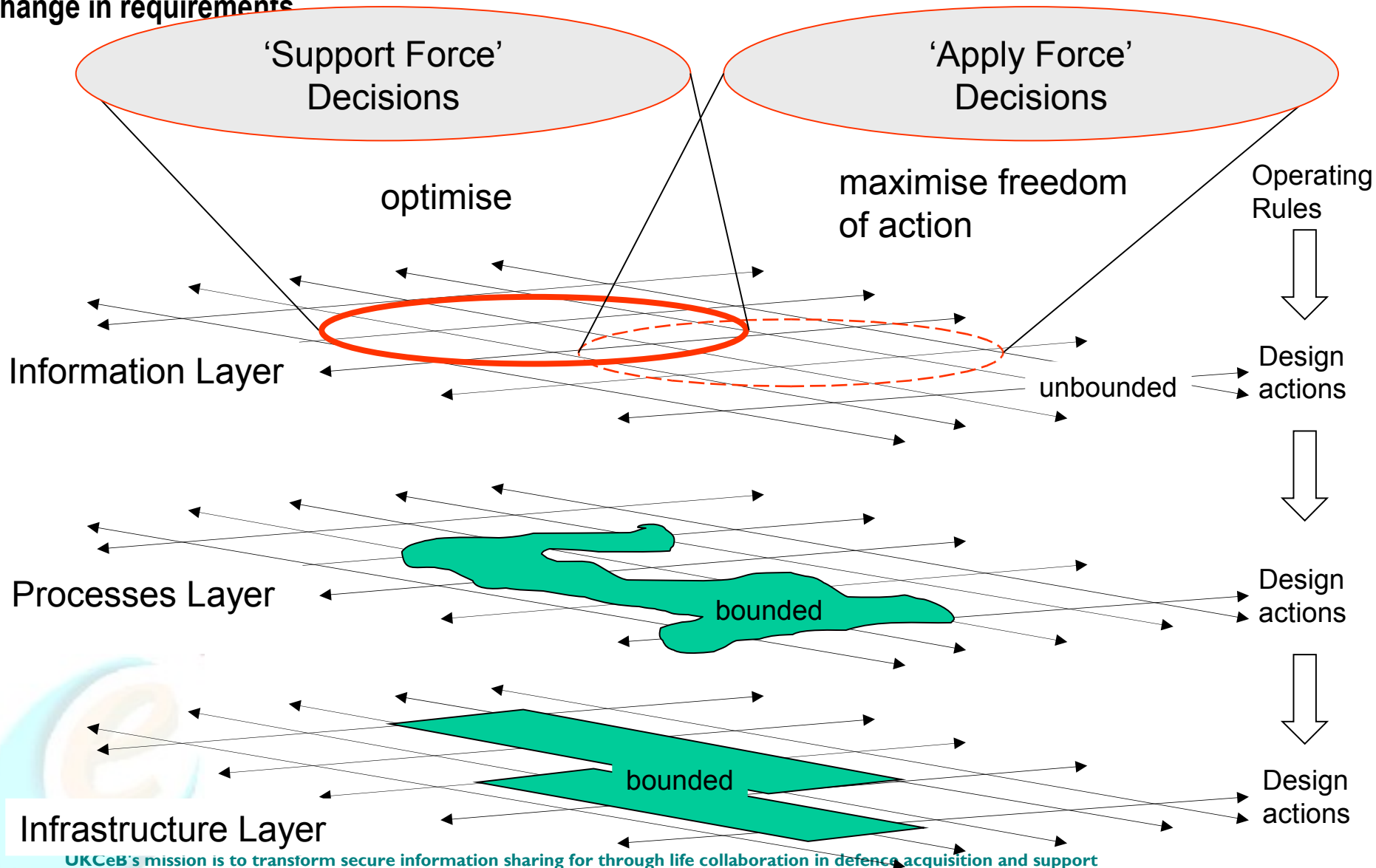
Steve Shepherd

3 June 2009

UK Council for Electronic Business
6a Pinkers Court, Briarlands Office Park
Gloucester Road, Rudgeway, Bristol. BS35 3QH
01454 410 550
www.ukceb.org

Reference:

UKCeB's mission is to transform secure information sharing for through life collaboration in defence acquisition and support

The nature of the problem: the MOD support chain

UKCeB's mission is to transform secure information sharing for through life collaboration in defence acquisition and support

Design of support must be derived top down from the decisions required to direct action to maximize the freedom of action of operational commanders, and solutions should be designed to remain open to change in requirements

'Support Force' Decisions

'Apply Force' Decisions

optimise

maximise freedom of action

Operating Rules

Information Layer

unbounded

Design actions

Processes Layer

bounded

Design actions

Infrastructure Layer

bounded

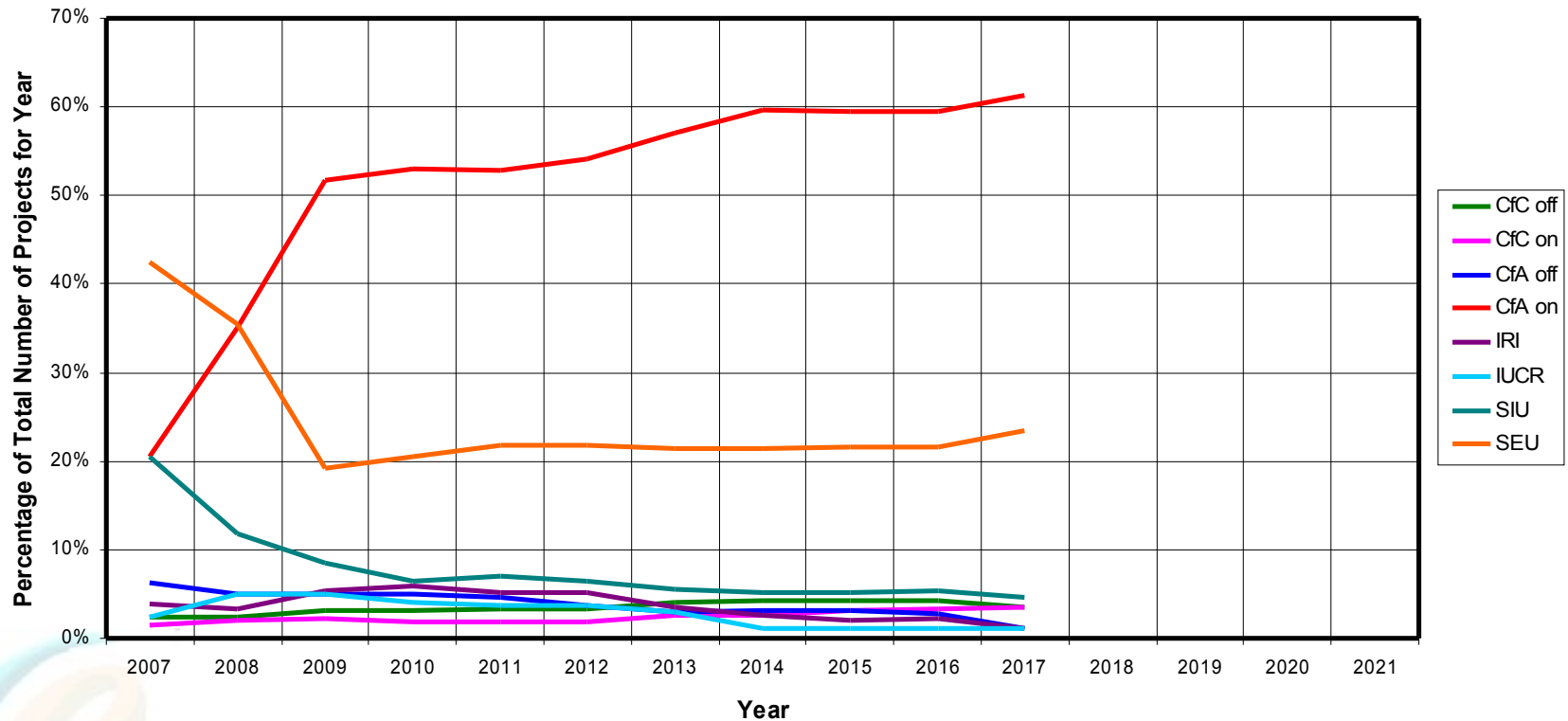Design actions

Defence Logistic Vision

The Defence Logistic Vision envisages a **highly effective, agile and networked logistic capability** that underpins the operational commander's ability to execute his mission successfully. This capability will be derived from **joint, integrated and interoperable support** concepts, which have been tested and developed to provide the military commander with confidence in his ability **to deliver effect at the desired tempo.** Success will be built on adaptable systems and force elements combined with **standardised logistic processes and procedures.**
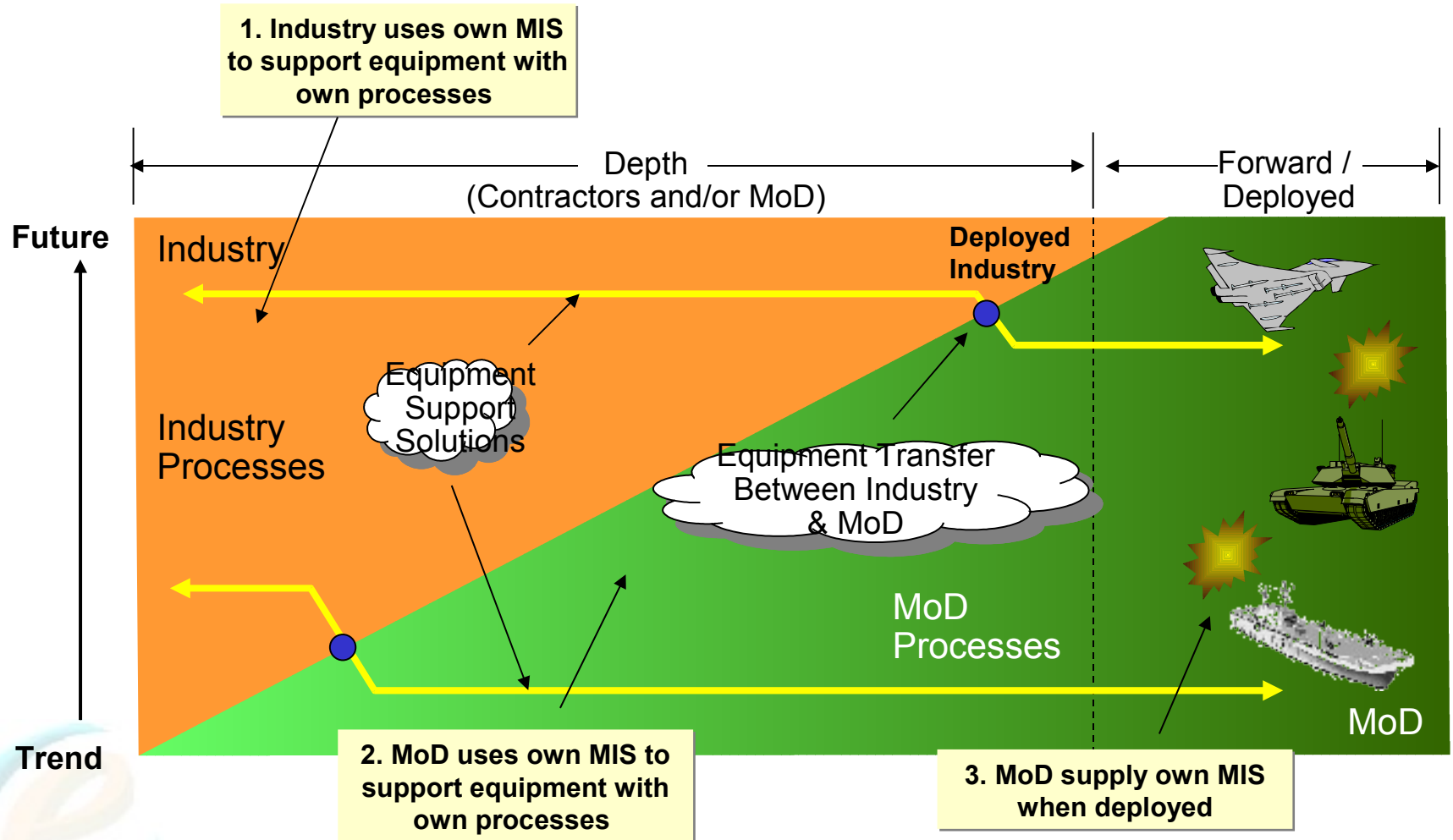
4

The nature of the problem

UKCeB
UK Council for Electronic Business
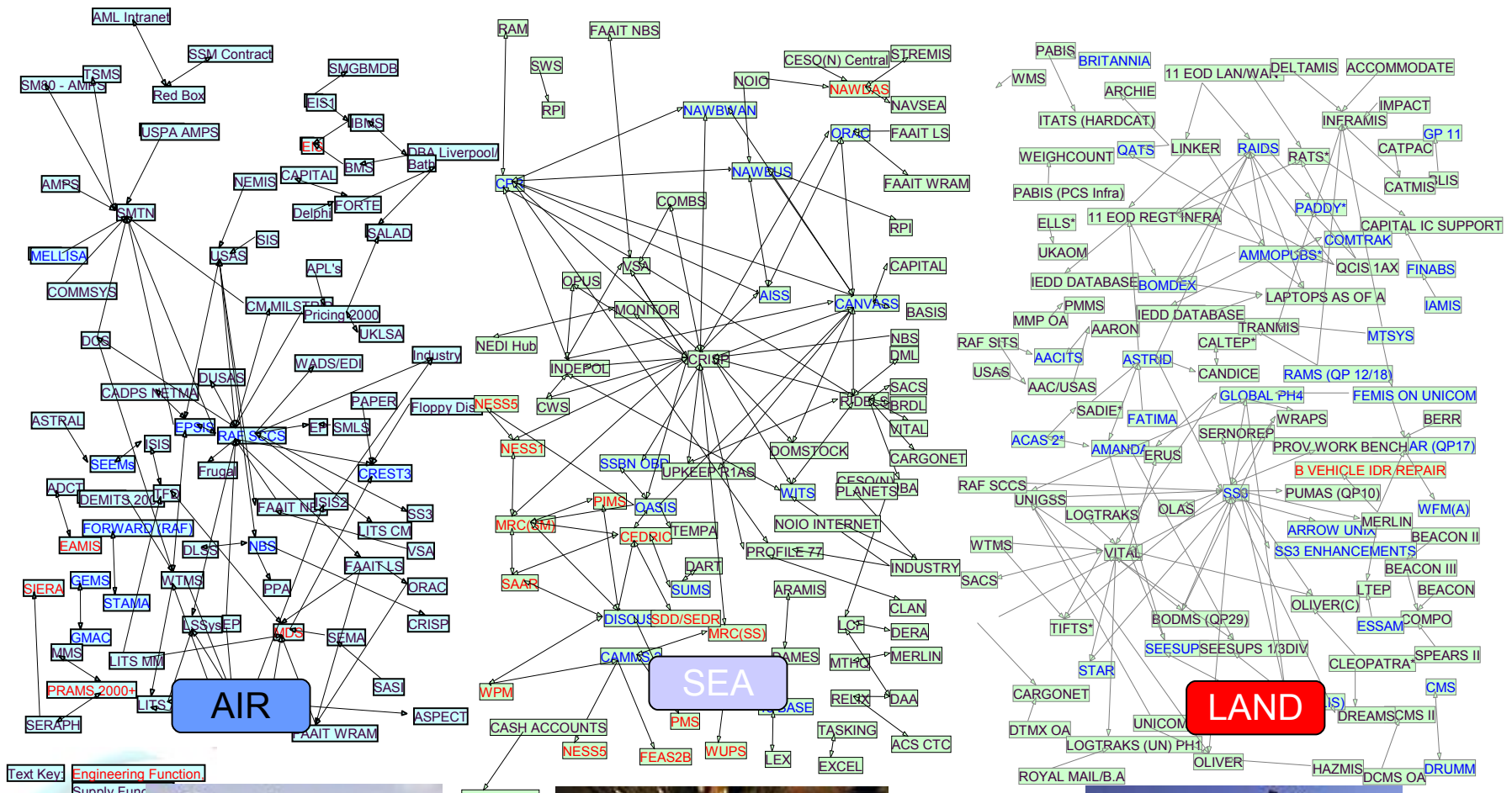
The Challenge of CLS / CfA - Procurement Landscape

Support Options Matrix (SOM) Category Forecast - Pan Defence

MoD / Industry Landscape

1. Industry uses own MIS to support equipment with own processes

Depth
(Contractors and/or MoD)

Forward /
Deployed

Future

Industry

Deployed Industry

Industry
Processes

Equipment
Support
Solutions

Equipment Transfer
Between Industry
& MoD

MoD
Processes

MoD

Trend

2. MoD uses own MIS to support equipment with own processes

3. MoD supply own MIS when deployed

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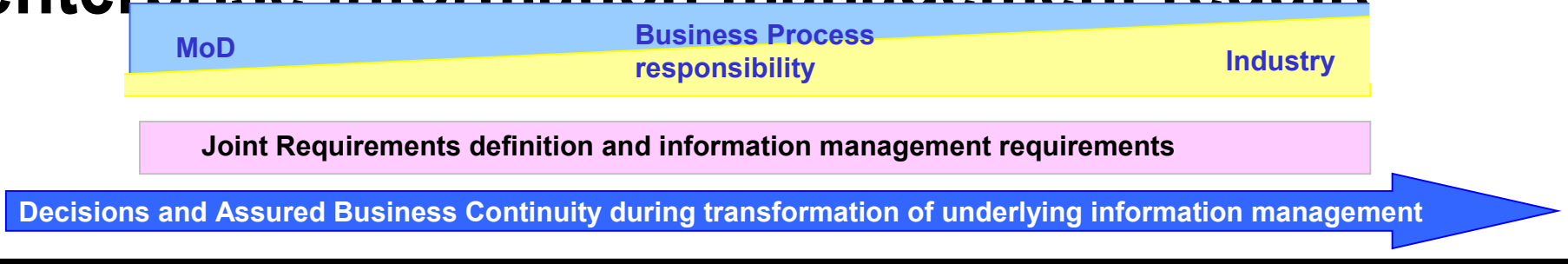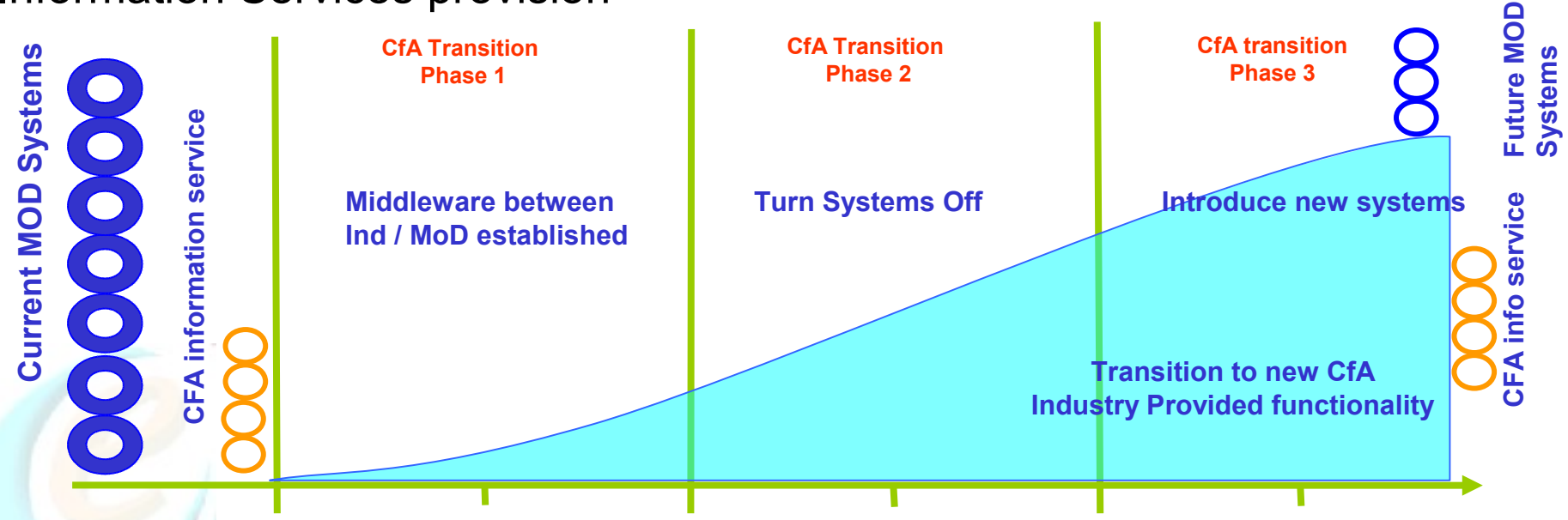
Key CLS/CfA User **Principles**

Require a process that delivers predictable and reliable access to data to reduce CLS/CfA contract risks:

- Long Term / Through Life
- Data required mainly in unprocessed form not information
- High %age of captured data required
- Agile to changing and evolving needs
- Secure - IP protected
- Reciprocal visibility / Exploitation of information as a joint asset
- CLS/CfA contractors will use its own "IS tools of the trade"
- Builds upon the LCIA functional model
- Underpinned by open architectures and by common data exchange standards to reduce costs of data and Through Life CLS / CfA

To achieve the transformation from current CLS contracts to the future goals we need to establish enterprise information management requirement

MoD

Business Process responsibility

Industry

Joint Requirements definition and information management requirements

Decisions and Assured Business Continuity during transformation of underlying information management

Information Services provision

Current MOD Systems

CFA information service

CfA Transition Phase 1

Middleware between Ind / MoD established

CfA Transition Phase 2

Turn Systems Off

CfA transition Phase 3

Introduce new systems

Transition to new CfA Industry Provided functionality

Future MOD Systems

CFA info service

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DIS – Information Availability?

"The end state for the Log NEC Programme is an agile and responsive capability that is able to proactively manage the logistic support chain through effective decision making based on accurate and timely information. It will be designed to manage a high rate of operational change and at the same time be capable of planning and delivering initiatives / projects that seek to provide continuous improvement within Defence Logistics."

Air Vice Marshall Matt Wiles – Director Joint Support Chain

Architectural Implications

- Need to get a grip of the processes
  - coherence within the MOD and with OEM partners
  - continuous and step change business process improvement
  - explicitly establish the link and then manage logistic processes in the real world and those coded in logistic applications
- To do this we need to address all components of the logistics enterprise architecture – business, information, data and technical

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THE LOGISTICS NEC PROGRAMME
DELIVERING
FUTURE LOGISTIC INFORMATION SERVICES (FLIS)

This Log NEC Prog rich picture is a representation of the business activities in support of the battlespace and no processes should be inferred

Support Chain Information Management

UKCeB - UK Council for Electronic Business

Business Process Platform

Application Portfolio

Enabling EIM Infra-structure

Business Process Composition

Integrated Composition Technologies

Business Services Repository

Custom Applications – MJDI, VITAL	Package Applications	External Services

Partner Data Integration	Asset Information Management	Business Intelligence Applications	Enterprise Content Management

Data Services

- Data Movement
- Data Enrichment
- Data Stewardship
- Publish and Subscribe
- Data Transformation
- Content Integration
- Data Access
- Data Quality

Metadata Management and Semantic Reconciliation

- Models
- Schemas
- Repositories/Registries
- Standards
- Business Rules
- Search
- Ontologies

Across Transactional, Operational and Analytical Sources

Partner Master Data

Product Master Data

Enterprise Data Warehouse

Content Repositories

XML Documents

WWW

Across Structured, Semi-Structured and Unstructured Content

Adapted : Gartner 2006

Support Chain Application Architecture
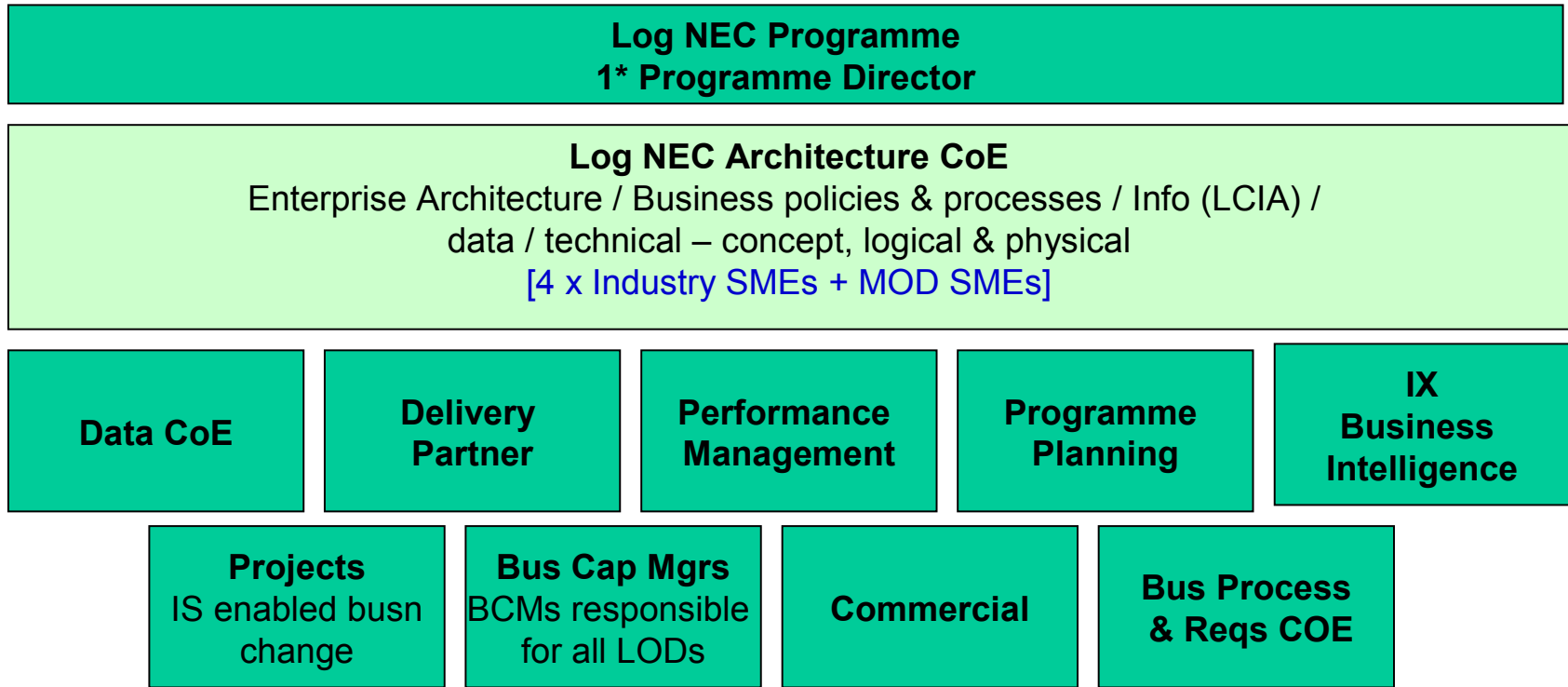
- Seamless integration of specialist applications underpinning processes – MOD or industry ①

- Ability to extract data from transactional applications – flexible, user driven, timely, affordable ②

- Data quality

- Store transactional data from multiple systems ③ and interrogate that data using business intelligence tools

- Be able to change business processes without necessarily having to hard code those ④ changes into legacy applications

- Provide a common presentational layer for logisticians across Defence

- A secure interface with our industrial partners ⑤

e.g……Joint Logistic Picture
Common Web Presentation Layer for Logistics

Business Process Mgt

Inventory Opt, Decision Spt APS

Secure interface with industry

EAI ①
Enterprise Application Integration (Oracle and IBM Websphere)

Management Information (BI Tool = COGNOS) ④

Enterprise Data Warehouse (Teradata) ③
LITS, SCCS, WRAM, USAS, RIDELS Jan 06 …SS3, VITAL wef May 07

Extract Transform Load (Ascential) ②

Ref Data (ISIS, SLIM, etc)

Transactional Applications
WRAM, USAS, SS3, LITS, VITAL, BODMS, OASIS, RIDELS, etc

S M I or D E C S ⑤

Industry

RR
AW

BAES
THALES
GD
LM

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Logistics NEC Programme

Log NEC Programme
1* Programme Director

Log NEC Architecture CoE
Enterprise Architecture / Business policies & processes / Info (LCIA) /
data / technical – concept, logical & physical
[4 x Industry SMEs + MOD SMEs]

| **Data CoE** | **Delivery Partner** | **Performance Management** | **Programme Planning** | **IX Business Intelligence** |

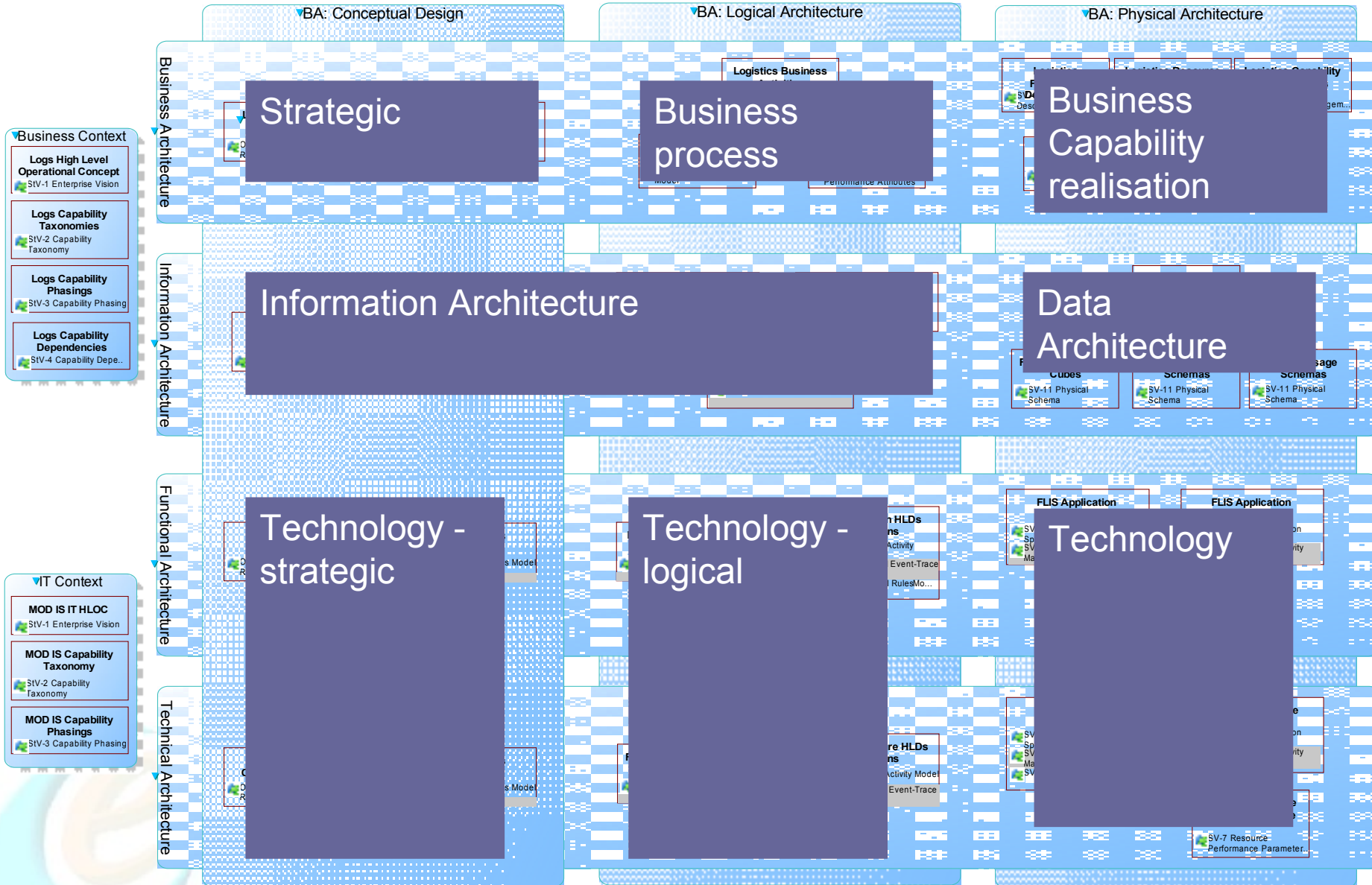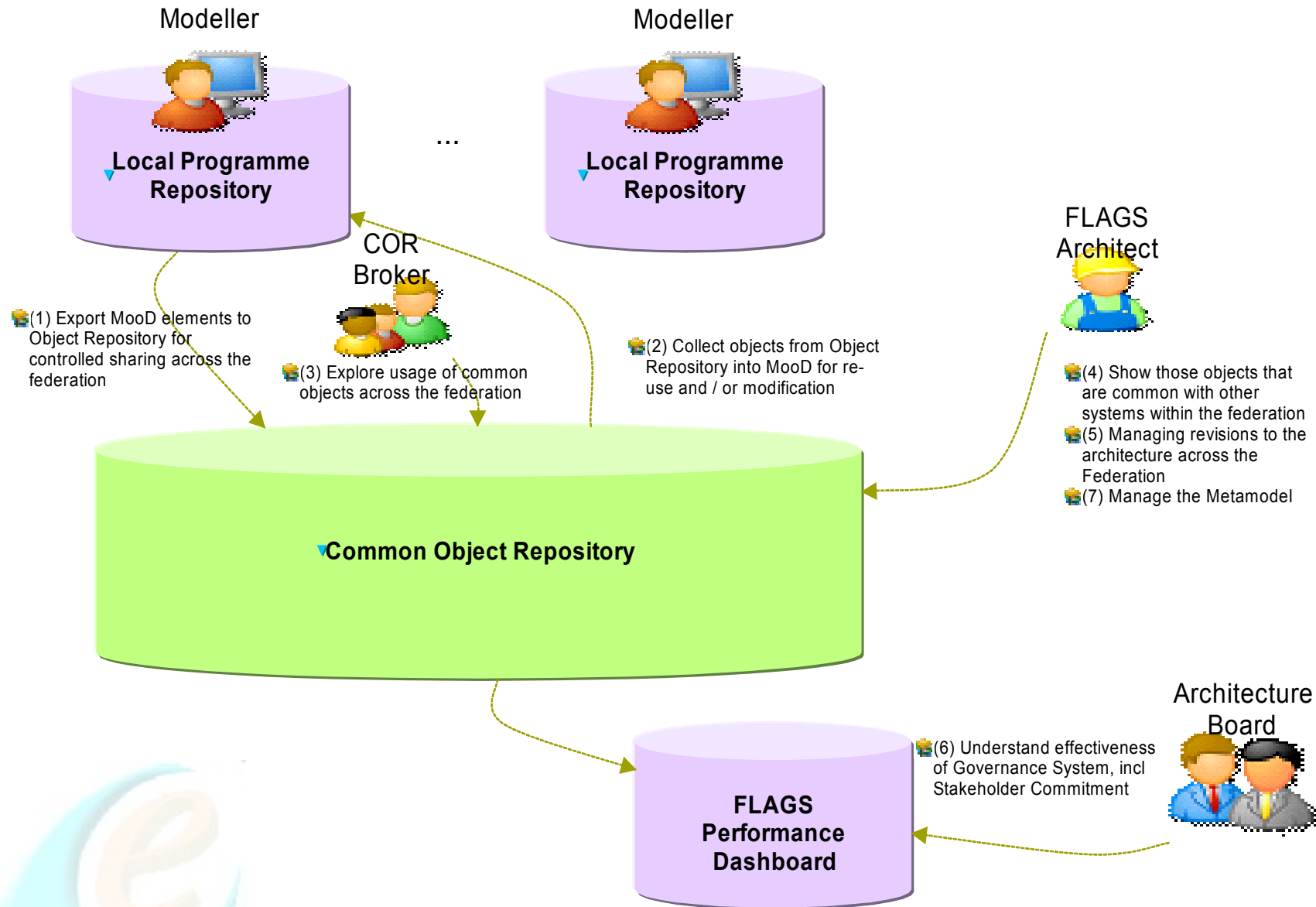| **Projects** IS enabled busn change | **Bus Cap Mgrs** BCMs responsible for all LODs | **Commercial** | **Bus Process & Reqs COE** |

"The end state for FLIS is an agile and responsive capability that is able to proactively manage the support chain through effective decision making based on accurate and timely information. It will be designed to manage a high rate of operational change and at the same time be capable of planning and delivering initiatives / projects that seek to provide continuous improvement within Defence Logistics."
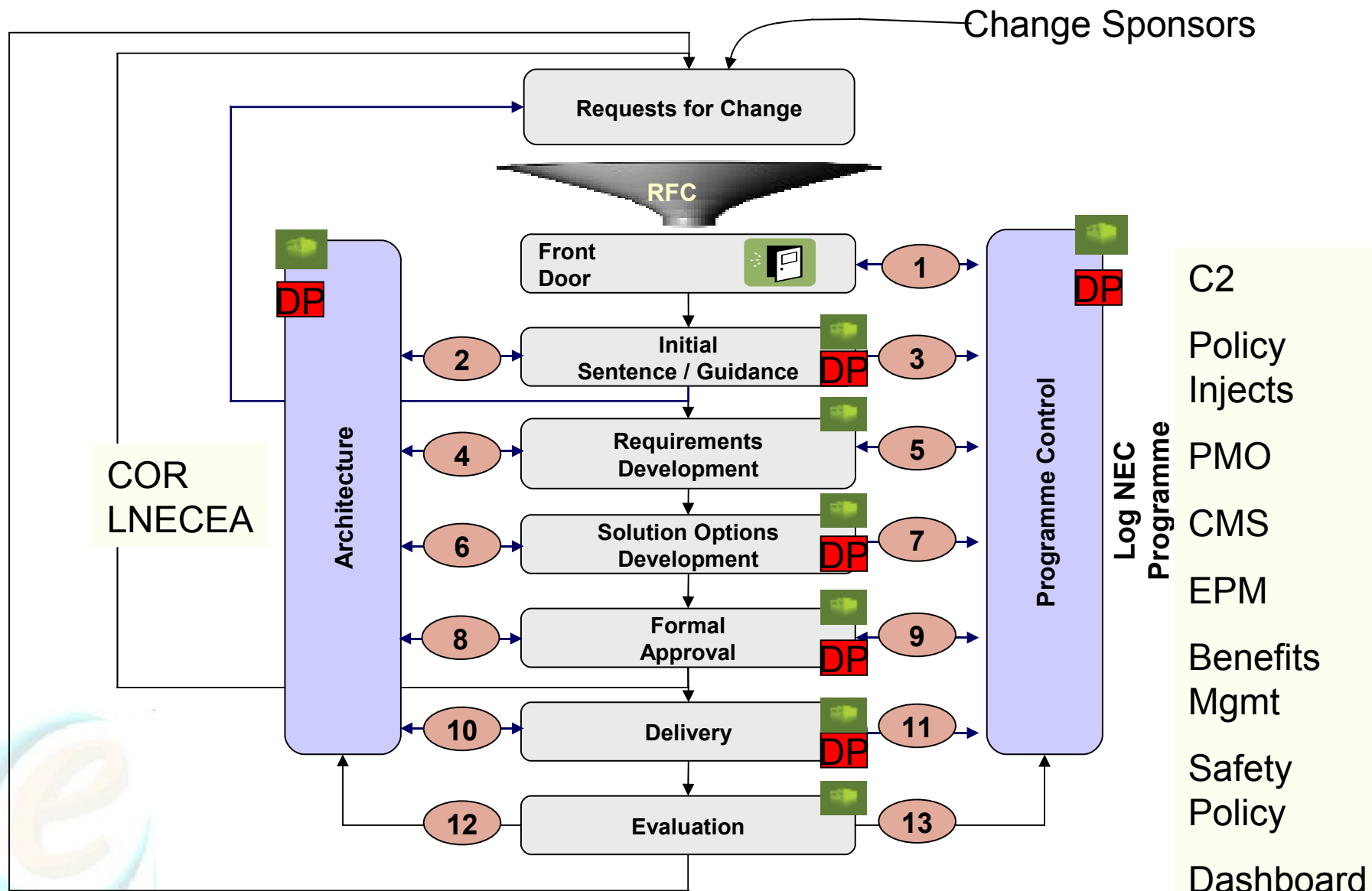
AVM Matt Wiles

Primus inter pares

UK Council for Electronic Business

Modeller

Modeller

…

Local Programme Repository

Local Programme Repository

COR Broker

FLAGS Architect

(1) Export MooD elements to Object Repository for controlled sharing across the federation

(3) Explore usage of common objects across the federation

(2) Collect objects from Object Repository into MooD for re-use and / or modification

(4) Show those objects that are common with other systems within the federation

(5) Managing revisions to the architecture across the Federation

(7) Manage the Metamodel

Common Object Repository

Architecture Board

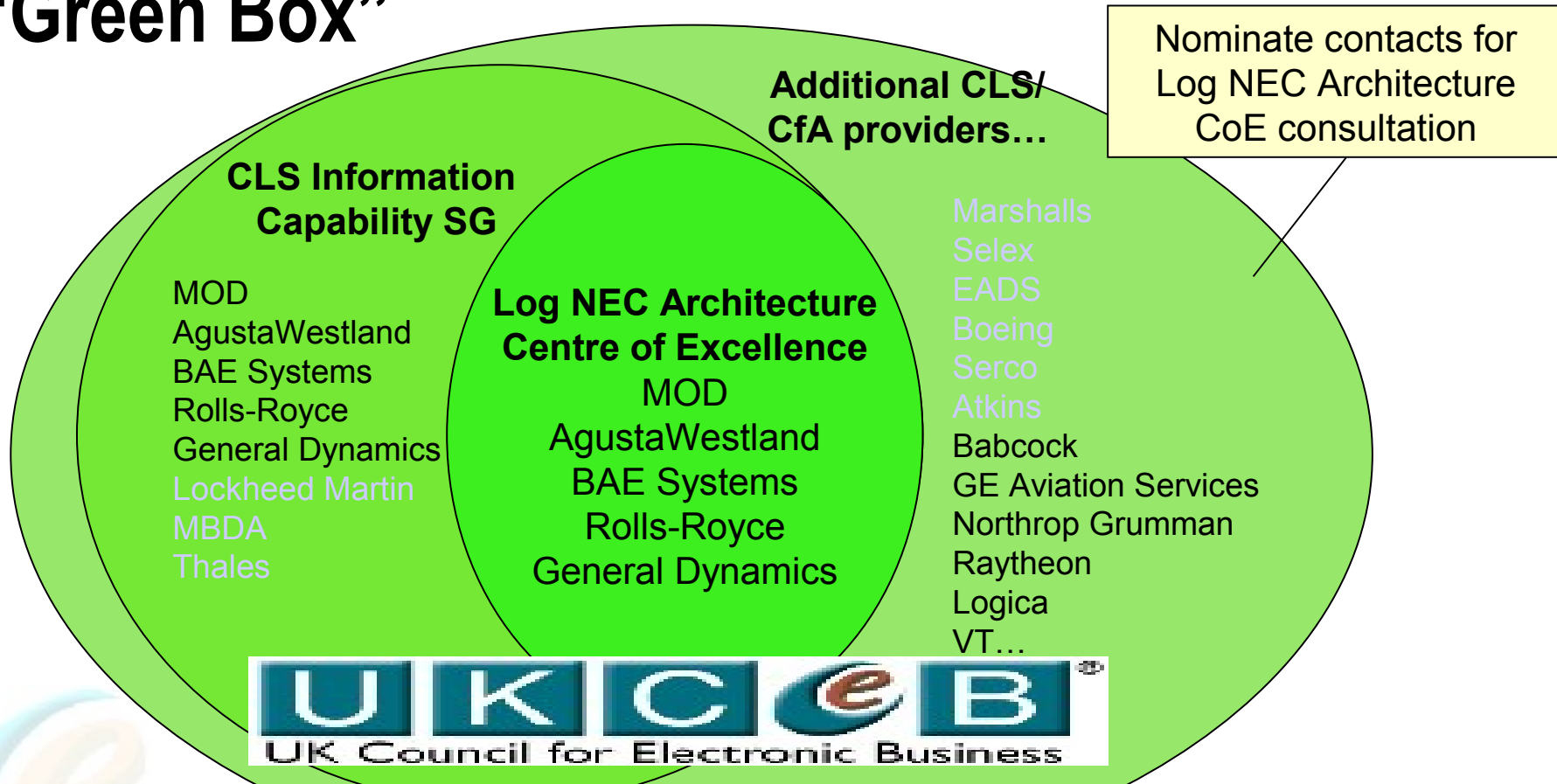(6) Understand effectiveness of Governance System, incl Stakeholder Commitment

FLAGS Performance Dashboard

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LogNEC Change Process

CLS/CfA providers engagement with the MOD Log NEC transformation activities - "Green Box"

Nominate contacts for Log NEC Architecture CoE consultation

Additional CLS/ CfA providers…

CLS Information Capability SG

MOD
AgustaWestland
BAE Systems
Rolls-Royce
General Dynamics
Lockheed Martin
MBDA
Thales

Log NEC Architecture Centre of Excellence
MOD
AgustaWestland
BAE Systems
Rolls-Royce
General Dynamics

Marshalls
Selex
EADS
Boeing
Serco
Atkins
Babcock
GE Aviation Services
Northrop Grumman
Raytheon
Logica
VT…

"If CLS Providers, including those not currently engaged in the Green Box, cannot be convinced that the 'process' works for them, then the enduring capability is unlikely to be implemented."

IBM Cognos Aerospace and Defence Special Interest Group

Keen to hear today from the experts how many of these issues can be addressed