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An Empirical Case Study of Problem Structuring in the Use of Generic Architectures

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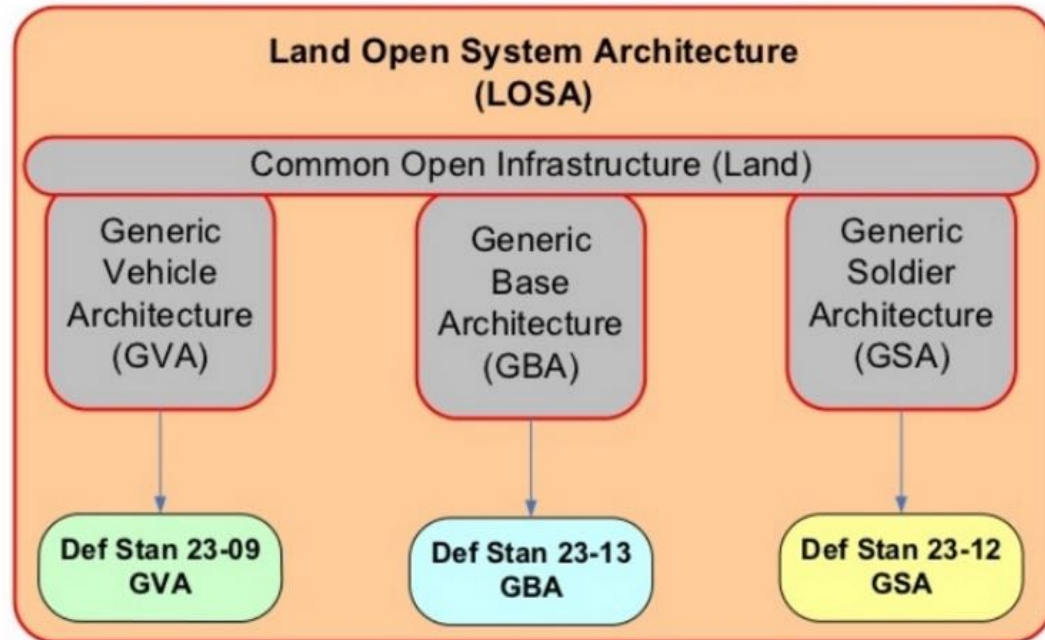
Defence Equipment & Support

Overview

- Background and Context

- Situation

- Approach

- Results

- Lessons Learnt
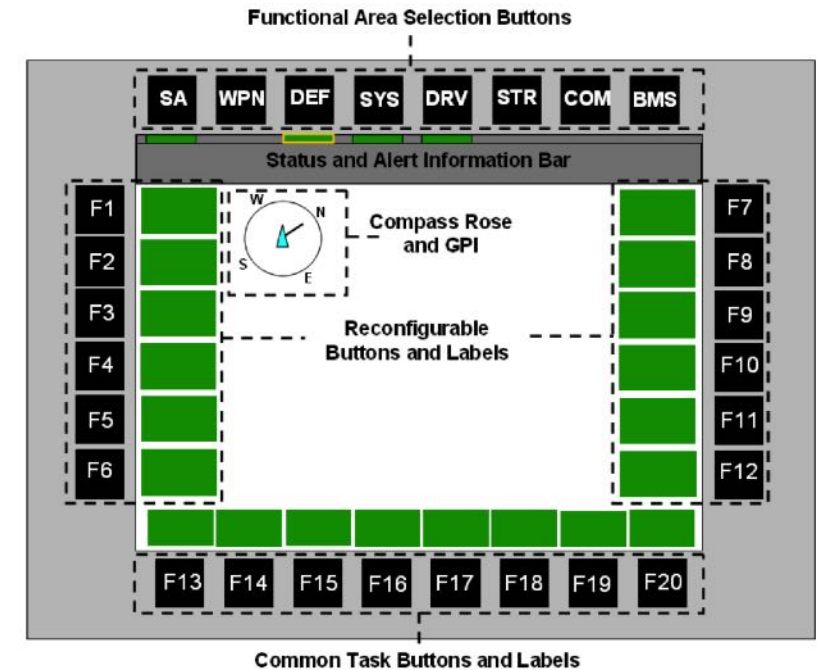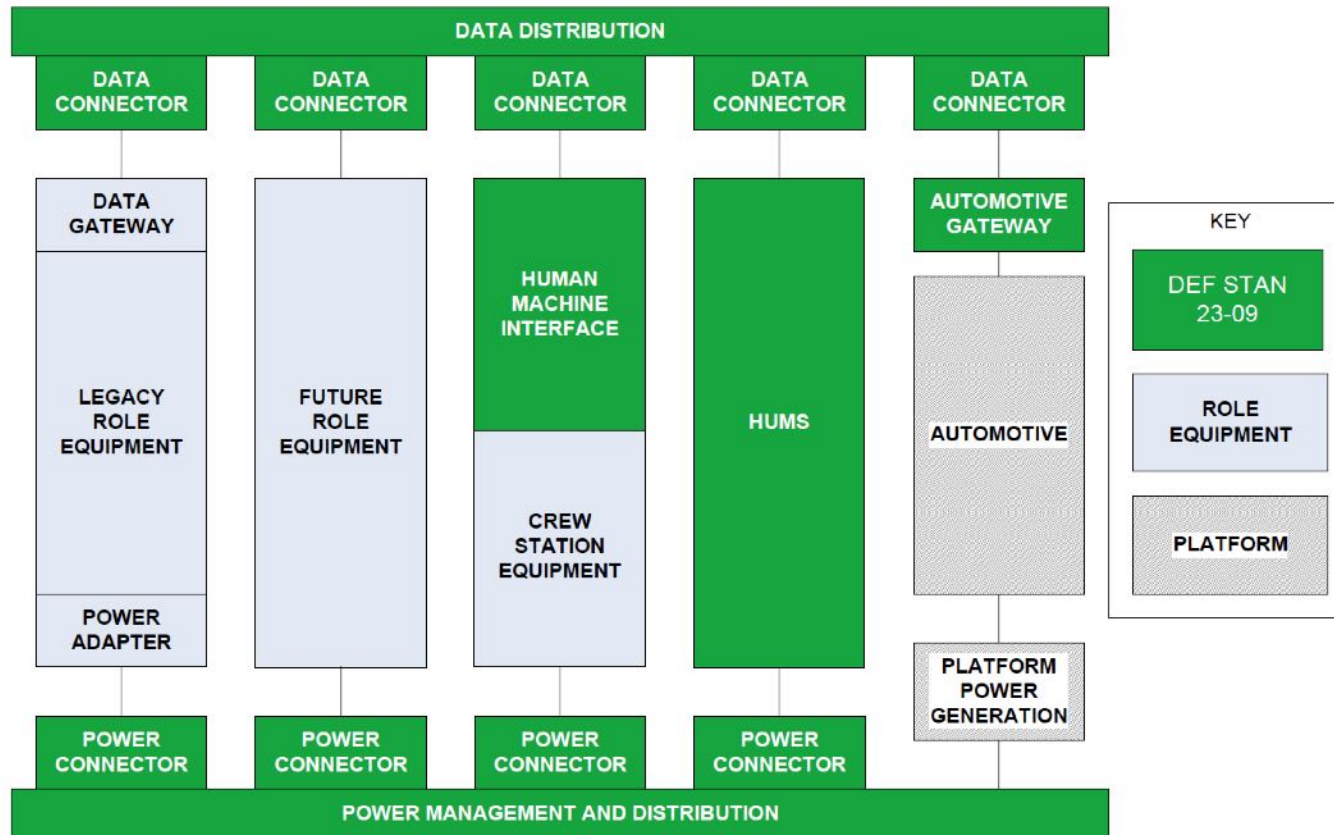
Background – Internal Technical Support

- DE&S in-house SE support team
- Provides specialist SE support to DE&S teams
- Formed in 2016
- Currently 22 people
- (Paper on forming up the team on Thursday morning)
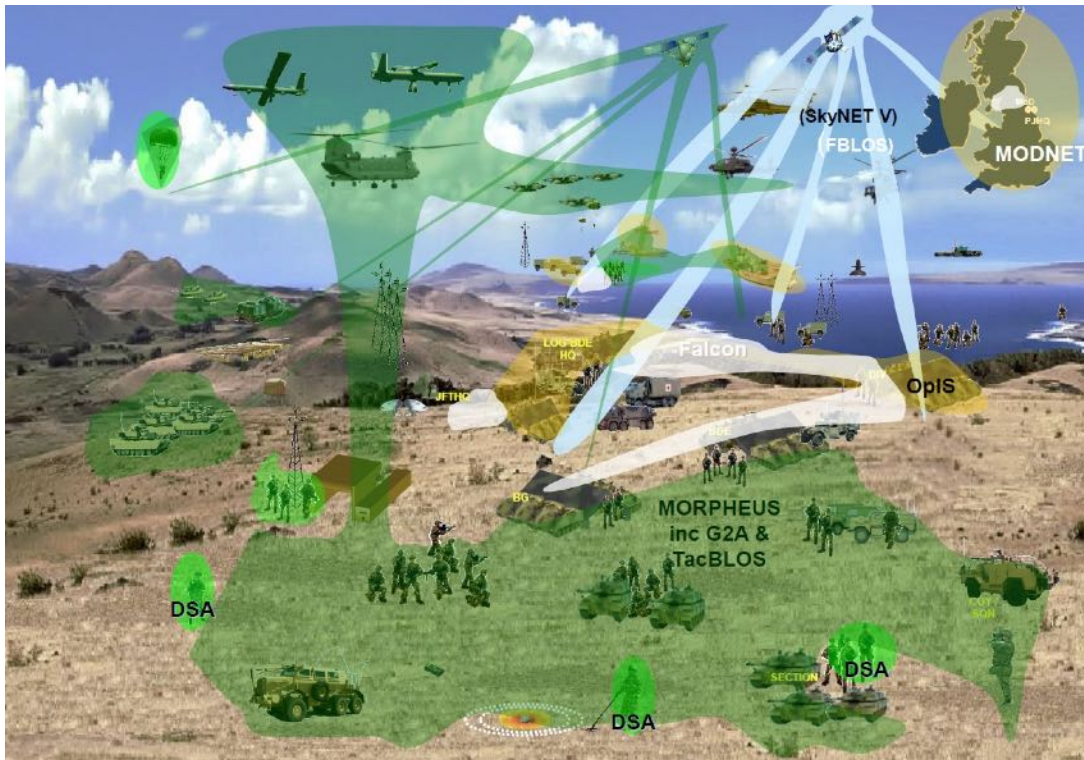
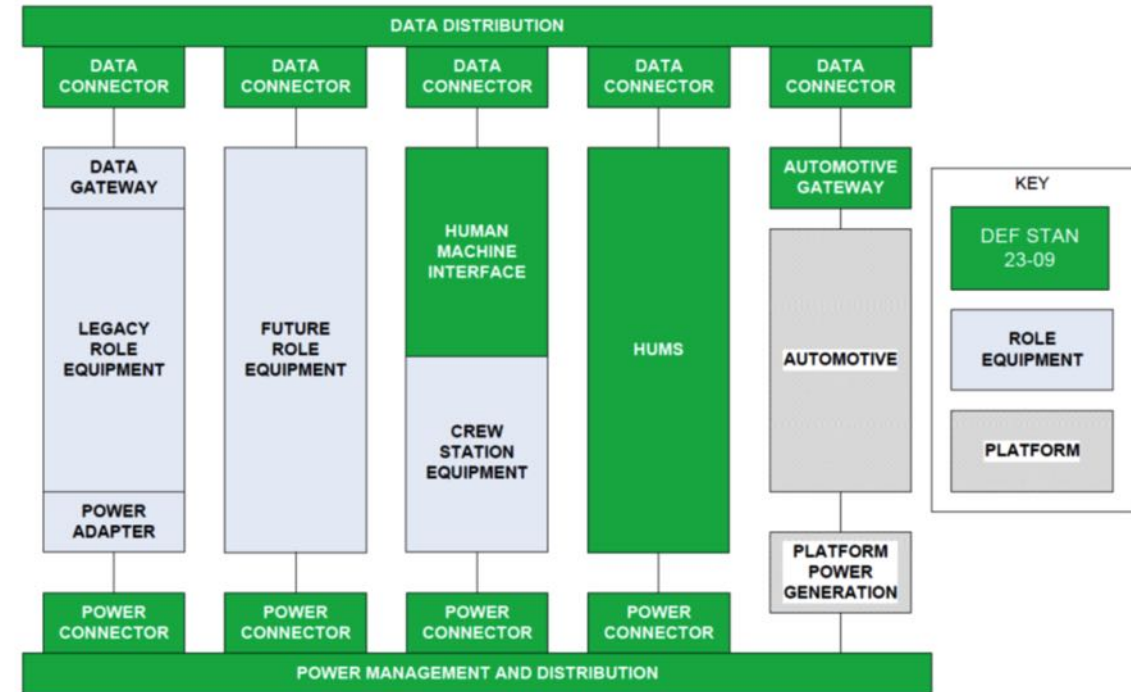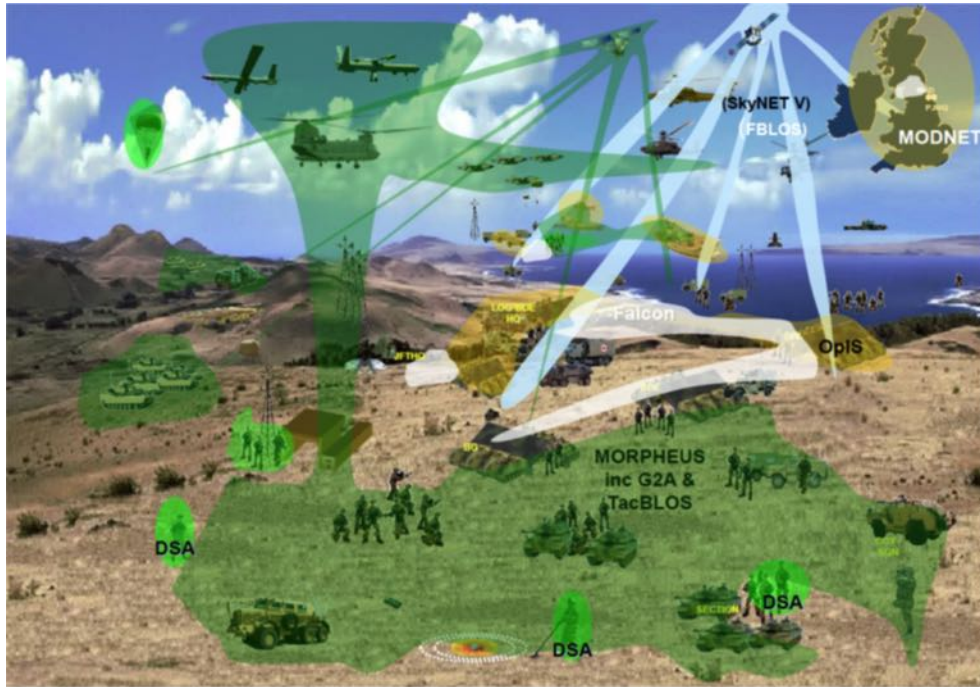# Generic Architectures in UK Defence

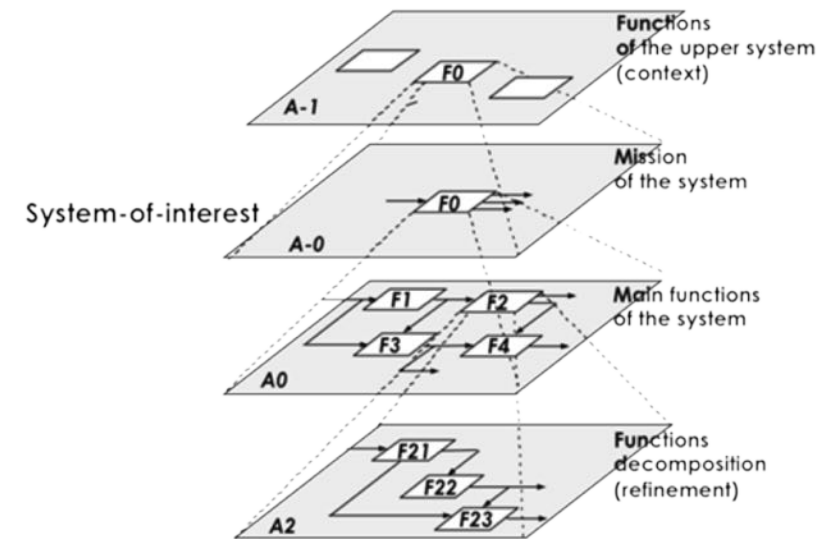# GVA scope

Morpheus overview

- Modular
- Interoperable
- Open
- Evergreen
- Agile
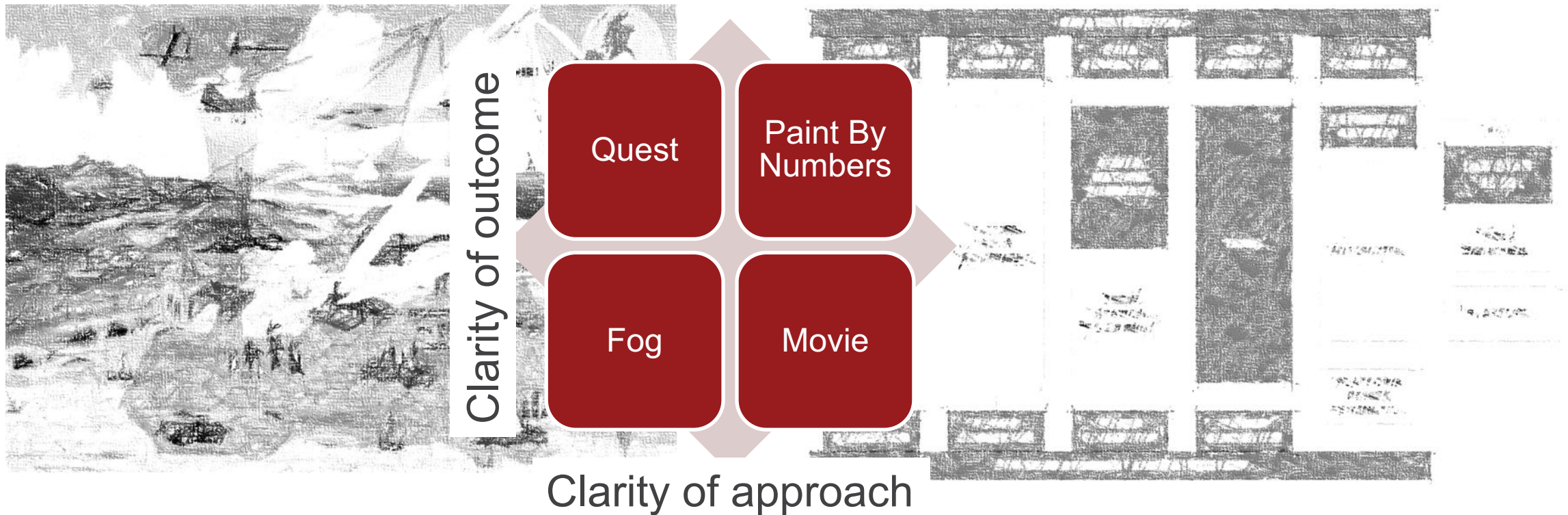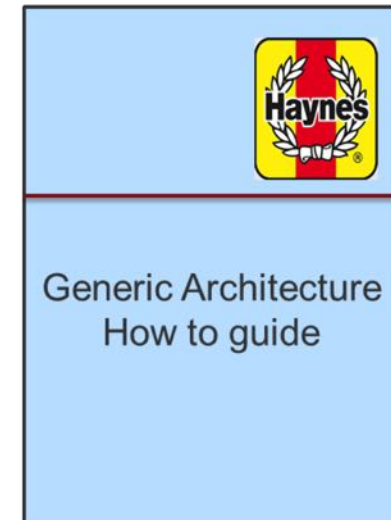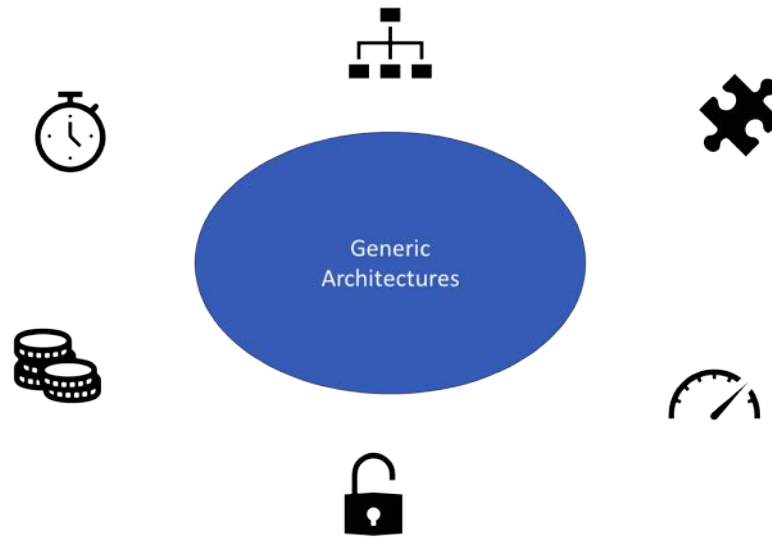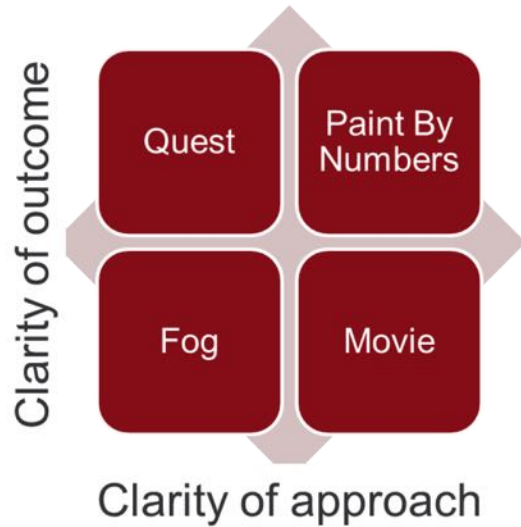- MOD as Design Authority

We need an architecture to integrate ...

Architecture – a journey or a destination
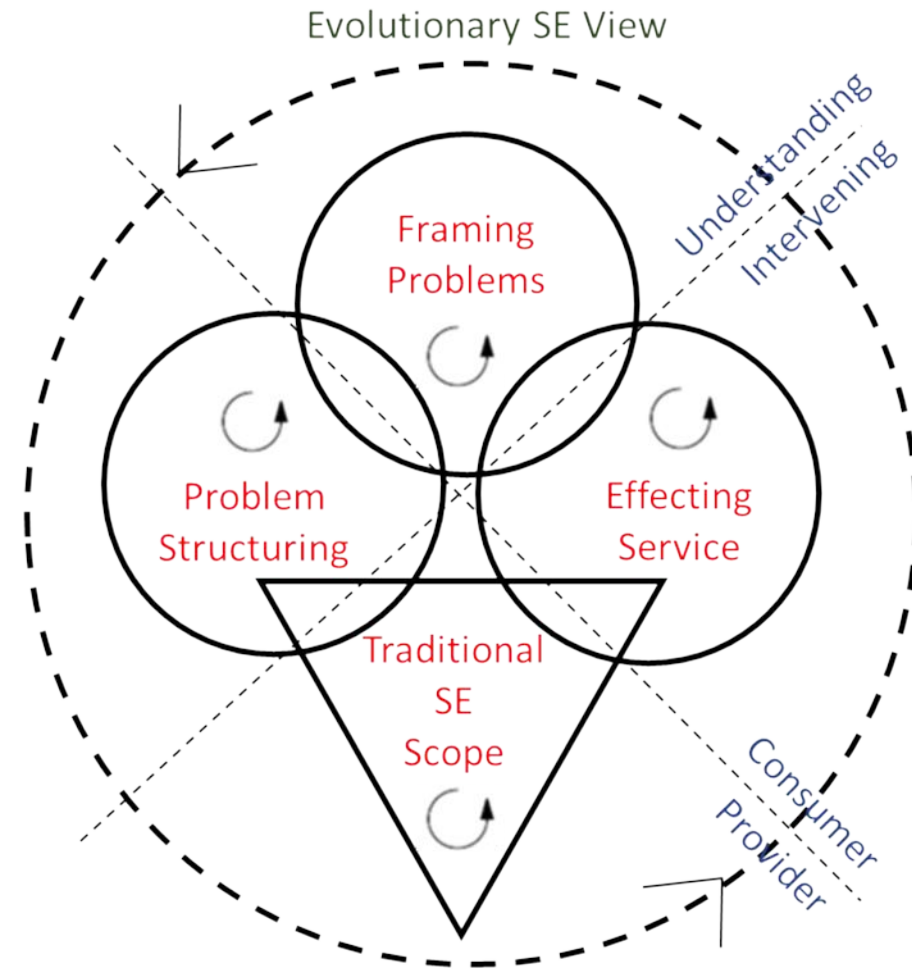
We need an architecture to integrate ...

Clarity of outcome

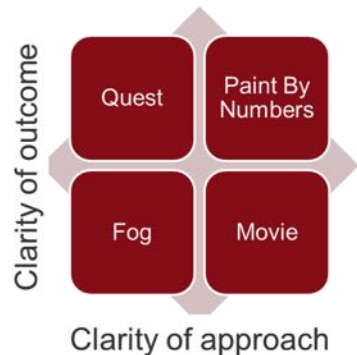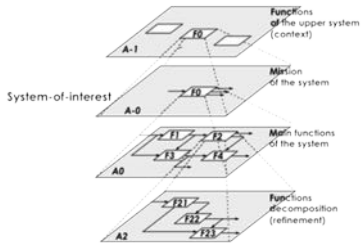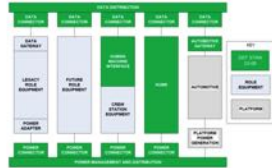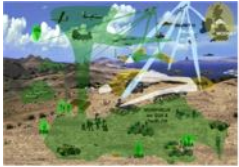|	
Quest	Paint By Numbers
Fog	Movie

Clarity of approach

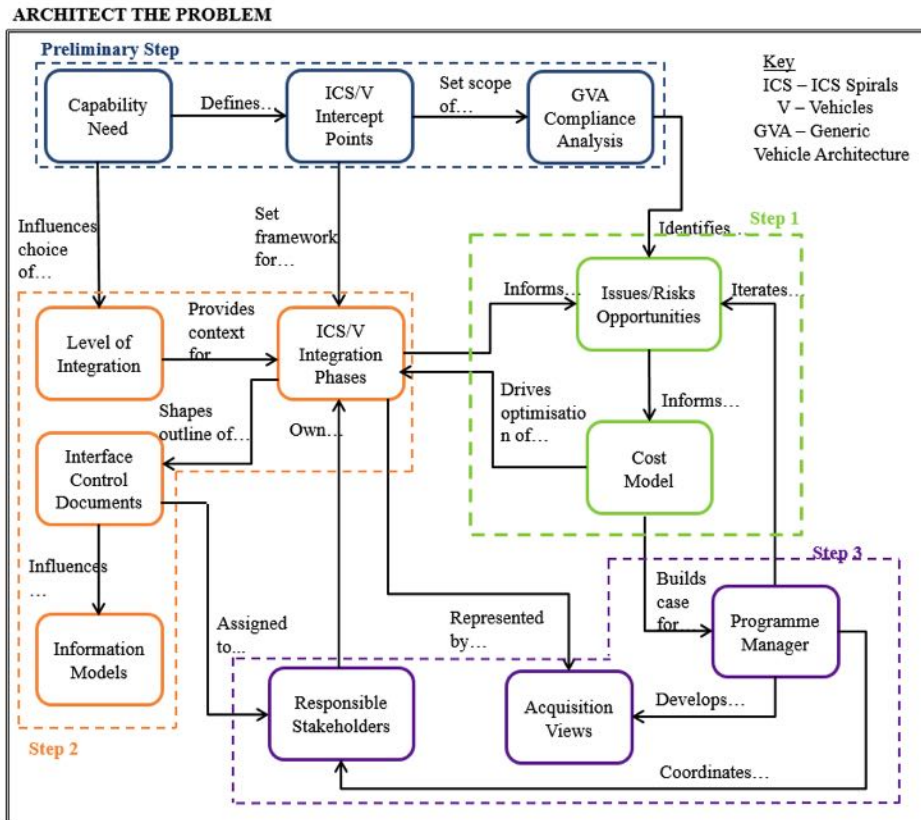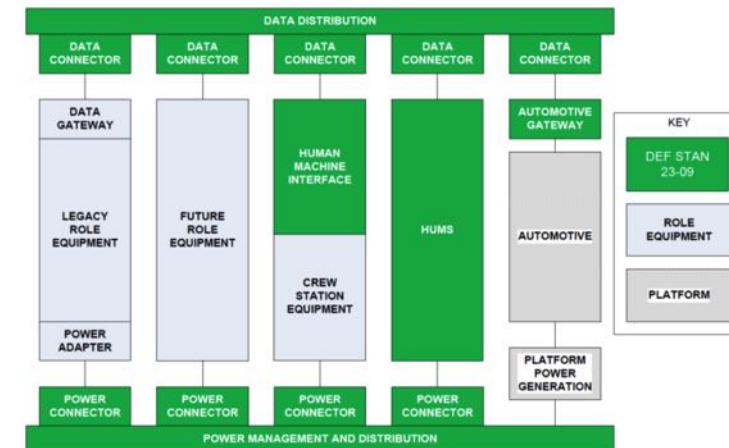*What is the purpose of the architecture?*

What type of architecture do we want?
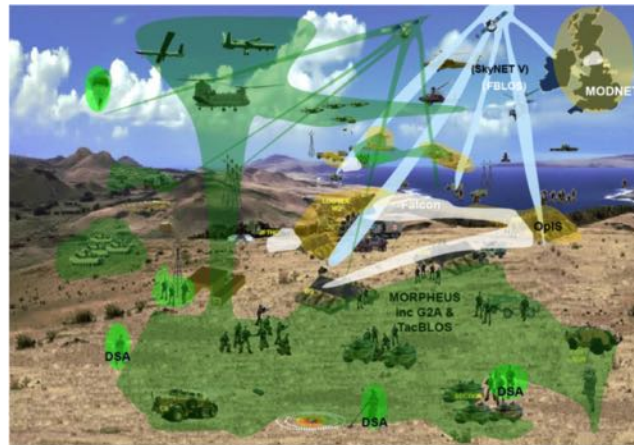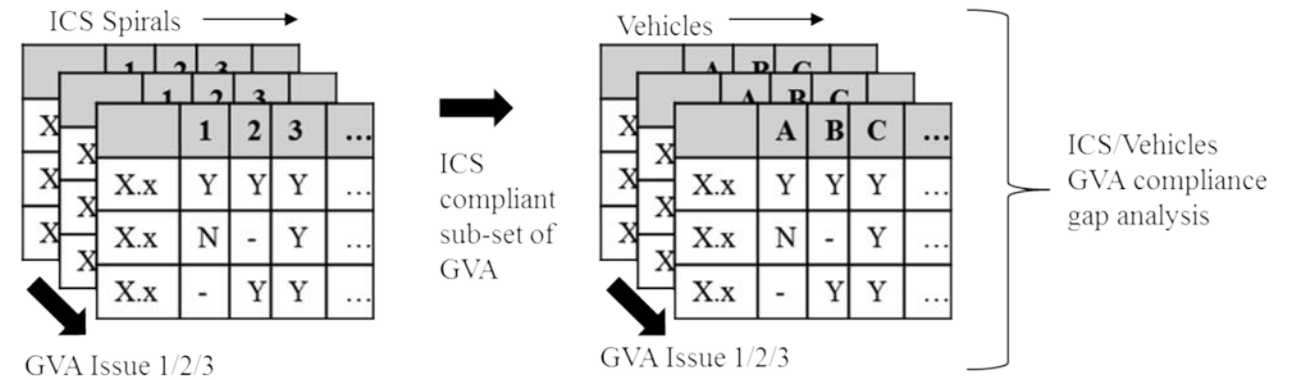
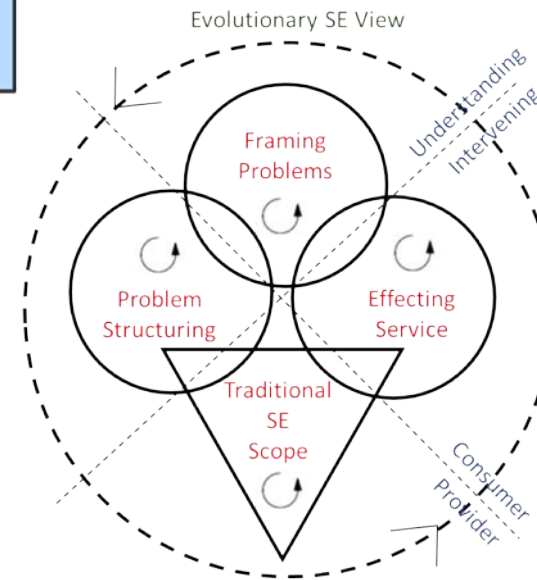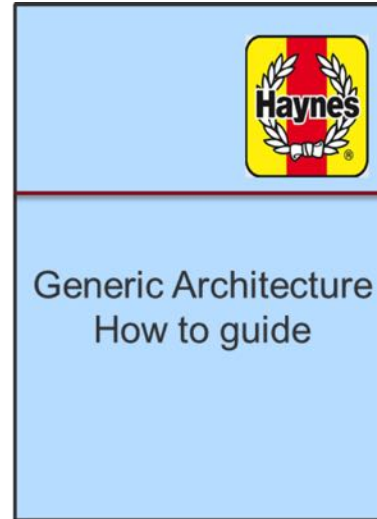# Approach – Problem Structuring
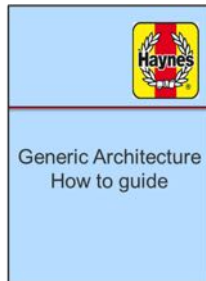
Architecting the Problem

- Agreement on Issues, Risks and Opportunities
- Agreement of what integration onto the vehicles means between
  - GVO team
  - Vehicle Platform Teams
  - Morpheus
- Agreement of who is responsible for what
- Common architectural
  - Generic Vehicle Architecture standard
  - Vehicle variants
  - Morpheus

Results

Key Lessons

Generic Architecture
How to guide

In-house staff

In house tasks

Contracted staff

Contracted tasks

PURPOSE

Evolutionary SE View

Framing Problems

Problem Structuring

Effecting Service

Traditional SE Scope

Understanding

Intervening

Consumer Provider

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