

**[dstl]**

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Ministry  
of Defence



# Putting Wargaming back at the heart of Defence and Security Analysis

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Connections UK, 09 September 2015

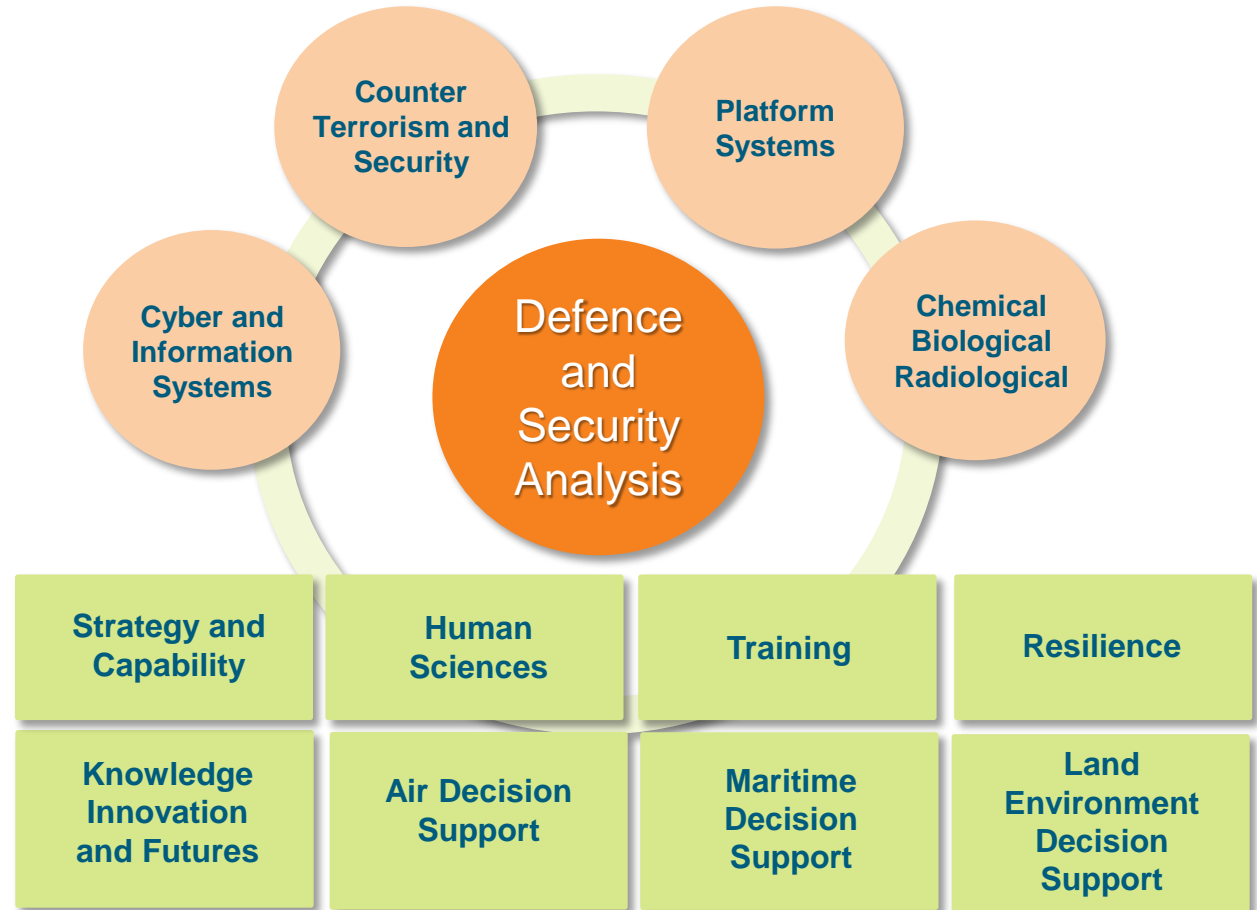
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# Defence and Security Analysis encompasses Dstl's analysis and human systems capabilities

## Dstl Divisions



## Our research Programmes

# DSA and our industrial & academic partners draw upon a diverse set of analytical methods

## Psychology



## Problem structuring



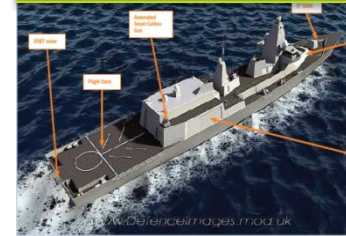
## Futures and horizon scanning

## Scenario development

## Cost analysis

## Balance of investment

## Capability analysis

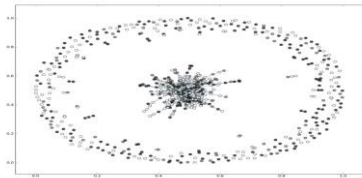


## Physiology

## Crime science

## Intelligence analysis

## Statistical analysis

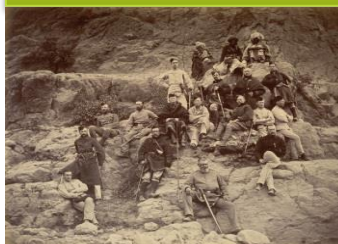


## Wargaming



## Defence and Security Analysis

## Historical analysis



## Simulation

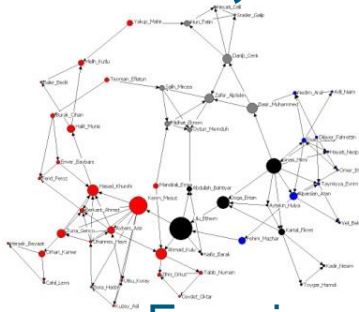


## Systems Engineering and Analysis





# These have evolved from simple to complex methods, and back to simple again



Ensuring success  
on operations



Improving the design  
of systems



Helping Ministers to experiment on  
issues of National Strategy

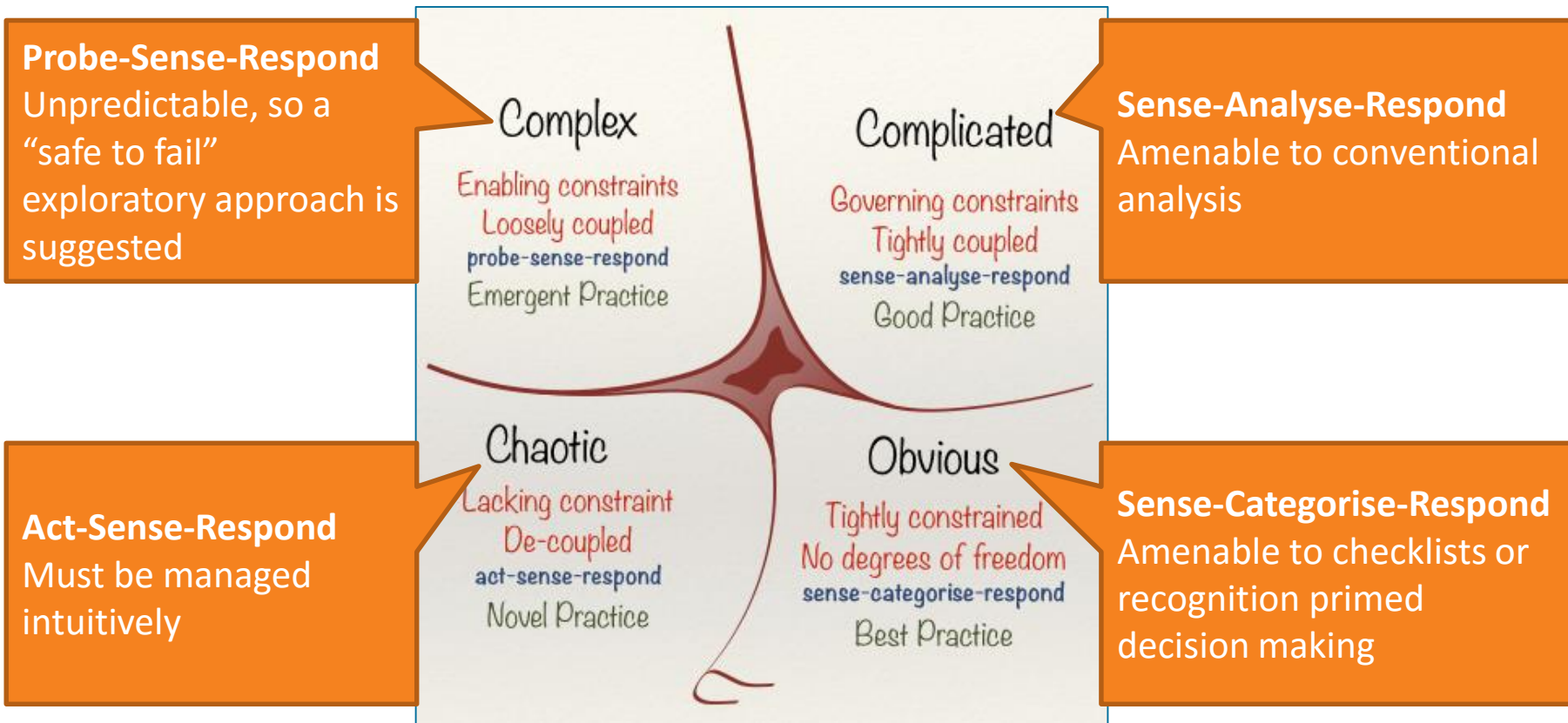


Advising Ministers on  
sensitive policy issues

# So why the renewed interest in wargaming?

1. Increasingly, the issues we address are human-centric, complex or chaotic and less amenable to conventional analysis

# Snowden suggests different techniques for managing problems by Cynefin domain



# So why the renewed interest in wargaming?

1. Increasingly, the issues we address are human-centric, chaotic and less amenable to conventional analysis
2. Sometimes it is better to help a customer to learn, rather than to learn ourselves, then teach them

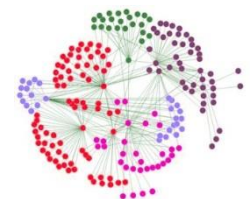
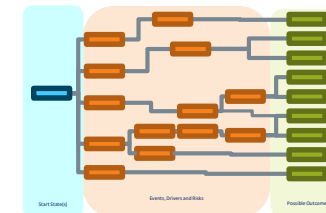
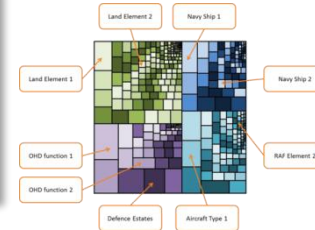


# Most of what we do involves helping others to improve their understanding

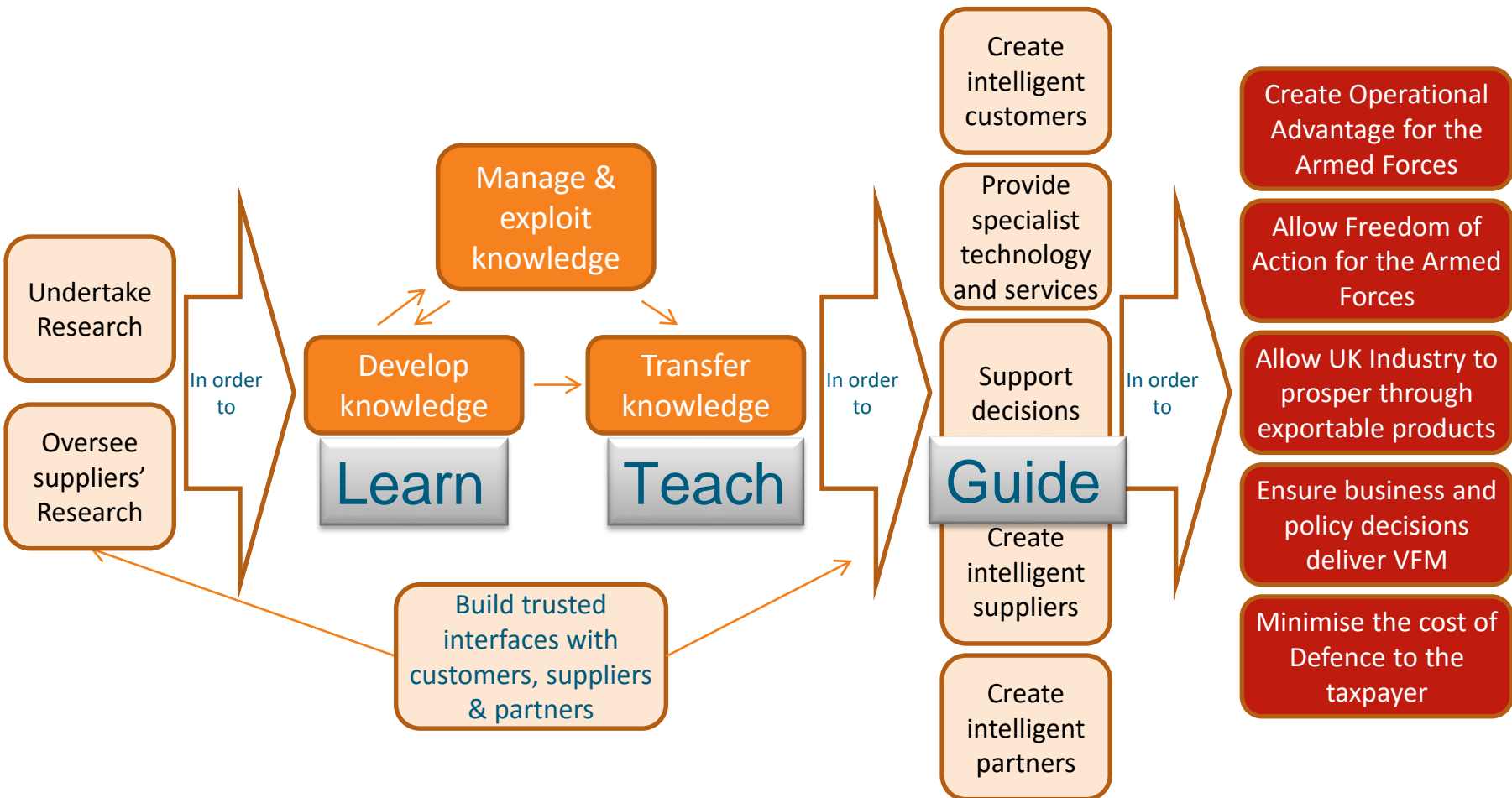
Working **with** decision makers to help them make **informed decisions**

Developing new understanding through experimentation as part of the **design** process

Developing better planning methods & tools



# But a common assumption is that policymakers are best supported by scientific advice



# So why the renewed interest in wargaming?

1. Increasingly, the issues we address are human-centric, chaotic and less amenable to conventional analysis
2. Sometimes it is better to help a customer to learn, rather than to learn ourselves, then teach them
3. We need divergent thinking methods to open the minds of policymakers, not just convergent methods to choose solutions

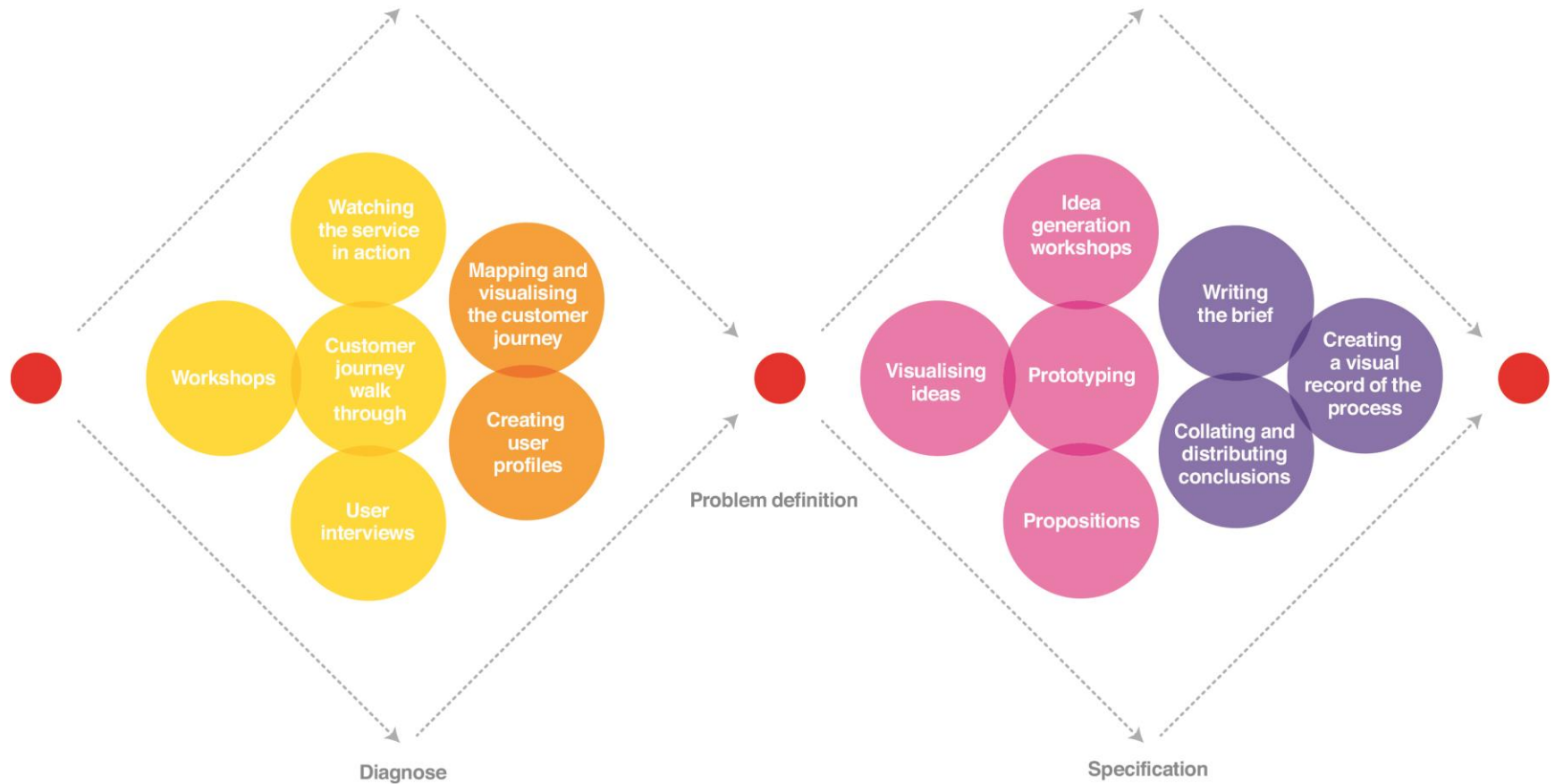
# The design process involves divergent and convergent steps

Discover

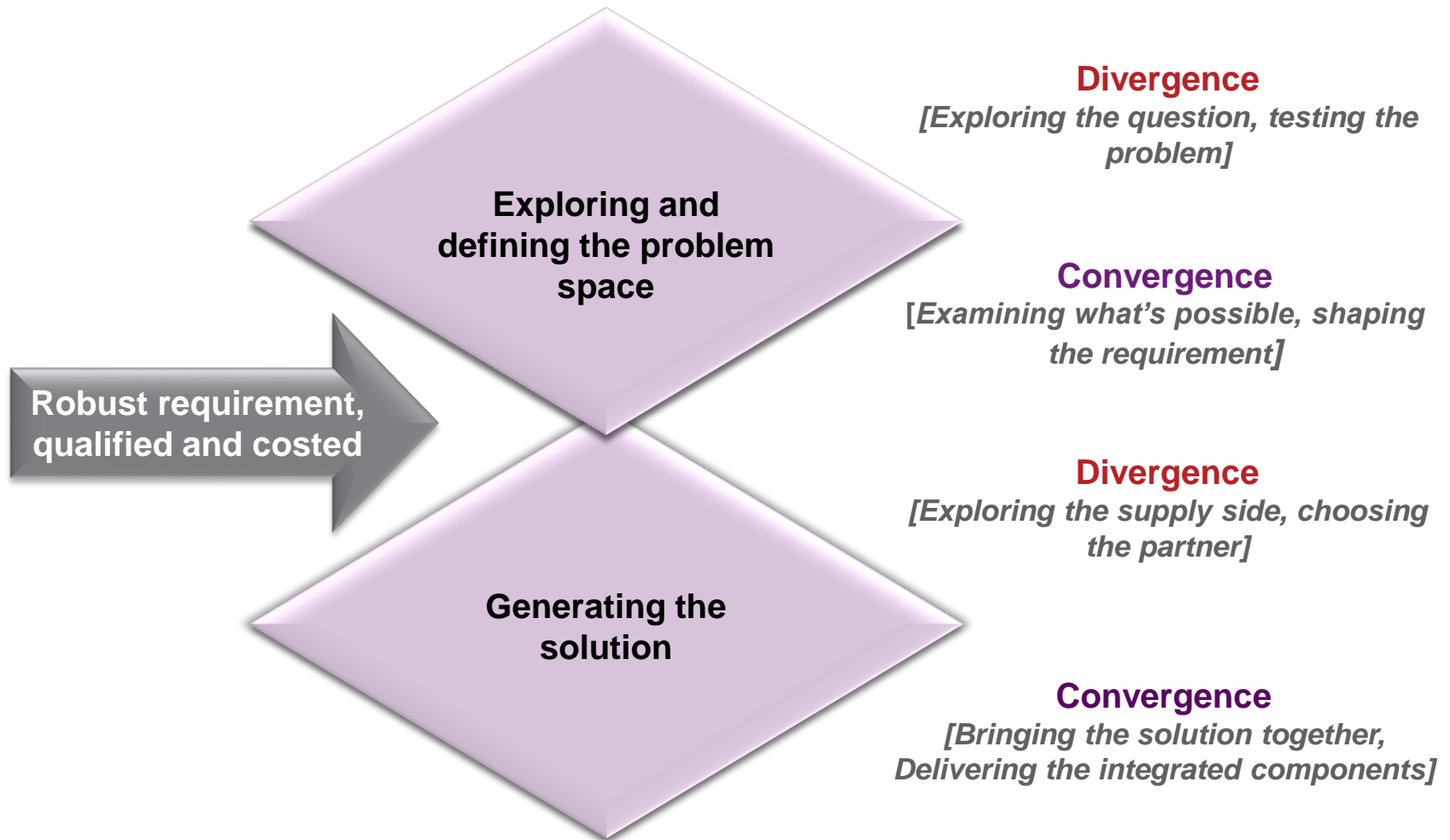
Define

Develop

Deliver



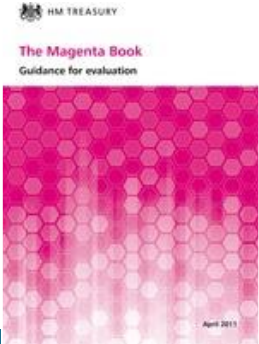
# This concept has been adopted by Niteworks



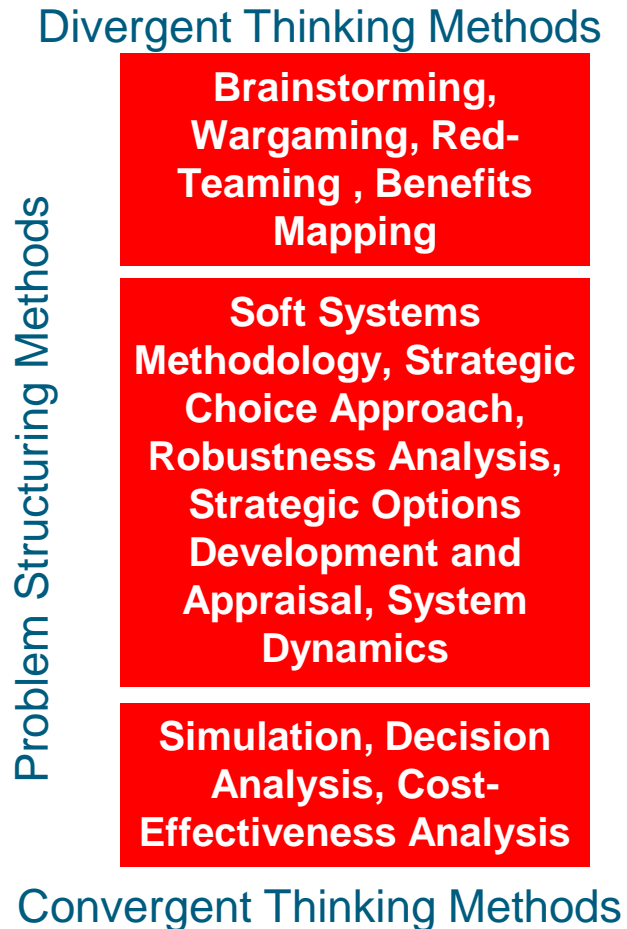
Reproduced courtesy of Chris Jordan, Niteworks



# ...and in the Government's “policy cycle”



# Wargaming is one of the tools that can aid divergent thinking and innovation

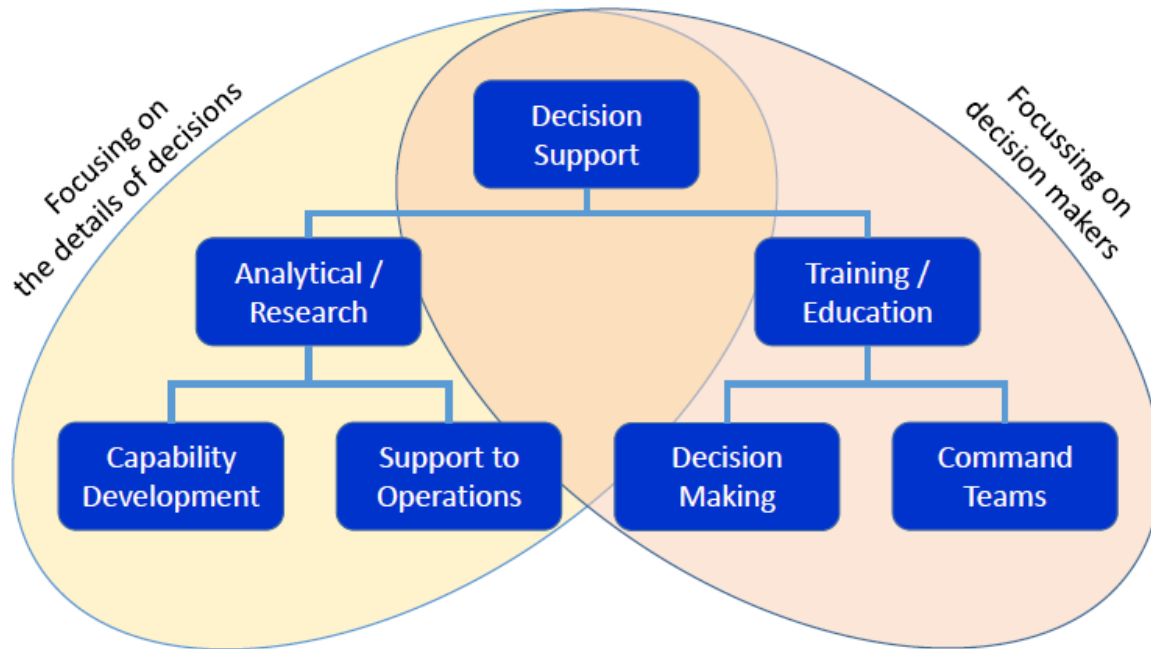


## Why is this important?

- Preparing for the unexpected
- Renewed focus on innovation
- Limited experience of policymakers, limited availability of operations
- Facilitation, not analysis
- Learning by doing, safe to fail
- Breadth vs depth

# Dstl uses wargames for numerous reasons

## Wargaming Applications

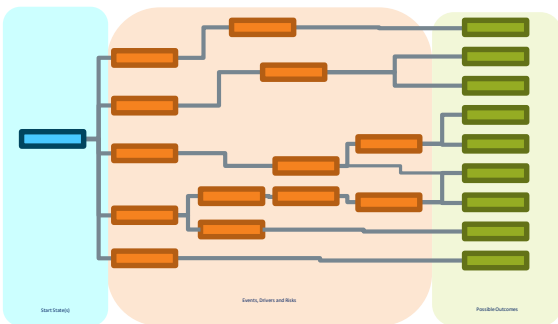


Wargaming is an art, not a science

# Examples of Dstl wargames



Testing ISAF plans in Afghanistan



Developing contingency plans



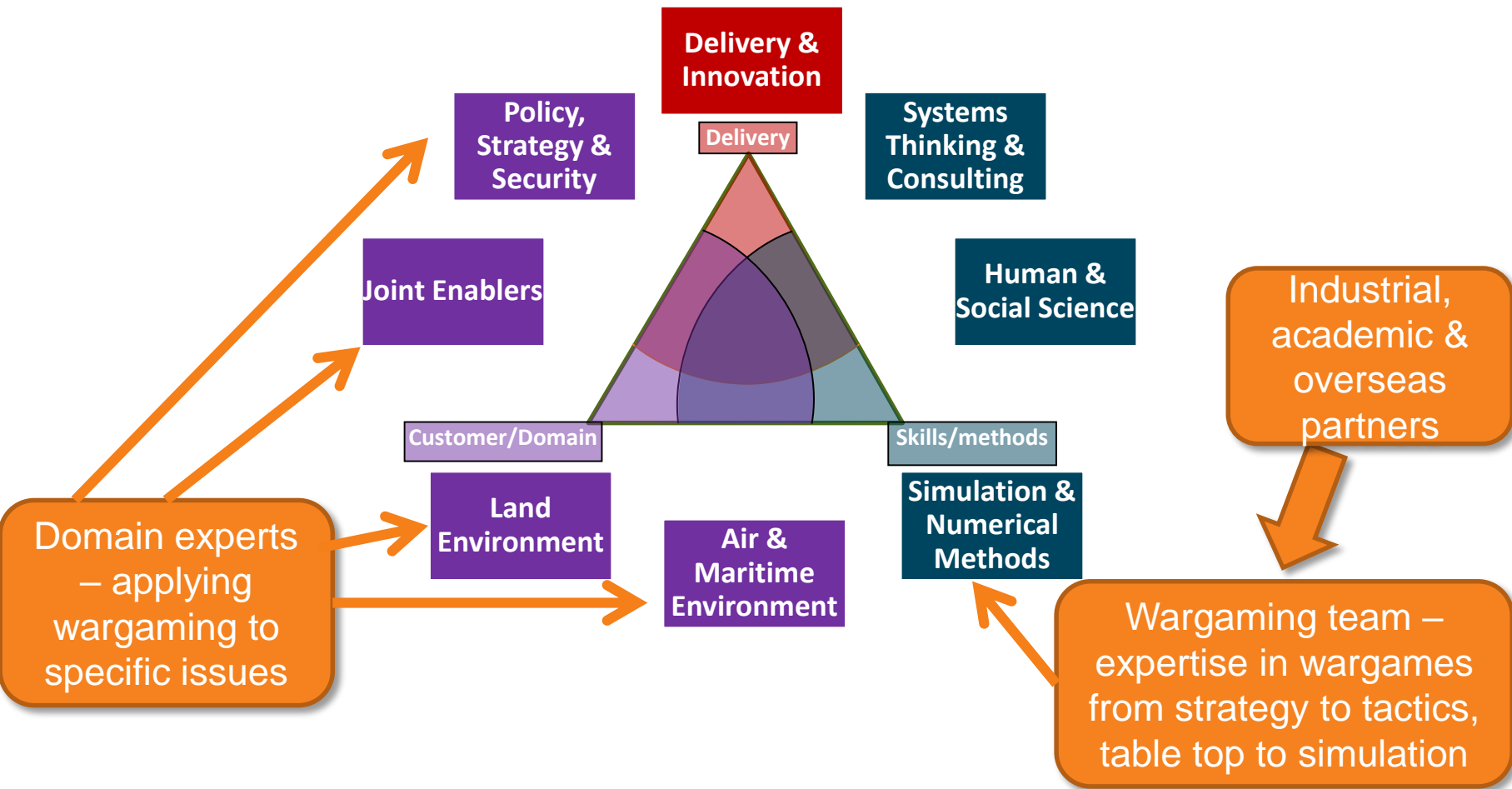
Helping Ministers to experiment on issues of National Strategy

Force Development and training



Helping senior policymakers across Government experience infrequent threats

# We are drawing together our wargaming skills into a new hub in DSA





# I expect to see a growing appetite for wargaming across UK Defence and Security

- Training decision makers and policymakers
- Exploring new areas of policy
- Renewed focus on innovation
- We're investing in wargaming, and we're open to offers for partnership and collaboration
  - through the Analysis Support Construct (via CORDA)
  - or x-Government / International Research Collaboration

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