

[dstl]

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Ministry
of Defence

PFT7 Main Execution Wargame

Soft OA supporting Hard Decisions

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Introduction

- Joined Dstl, Force Structure Analysis, in April 2017
 - Working on PFT 7 since my first week
 - Transferred to Wargaming Team in October 2018
- PFT 7 – Planned Force Testing 7
 - Part of Strategic Force Development (SFD): High level capability and strategic insights on the UK's planned forces
 - Set conditions for large amounts of subsequent analysis across a number of fields and by various means
 - Campaign planning and analysis, Blue and Red capabilities, novel and special effects and more

What was PFT 7?

- The largest UK wargame since at least the end of the Cold War
 - Three working weeks in the Joint Forces Battle Lab, Shrivenham
 - 150+ Blue planners
 - 50 planners and / or Adjudicators in Red and Exercise Control
 - Represented: Dstl, British Army, Royal Navy, Royal Air Force, Defence Intelligence, a US Combatant Command (COCOM) and other Departments across Her Majesty's Government
 - All components and capabilities working together – Land, Air, Maritime, Space, Information with Cyber and Electromagnetic Activity
- Linked manual Wargames looking at 'Warfighting at scale'

Aims of PFT 7

- To create a scenario-based evidence baseline
- Develop militarily credible, policy aware and resource informed campaign plans
- Determine UK force requirement for Warfighting at scale
- Develop an endorsed campaign narrative to:
 - Draw out insights
 - Provide context for vignettes runs by Command Force Development
 - Set conditions for subsequent analysis
- Insights: Force Structure deductions, identify risks and gaps, sovereign capabilities, the A2AD challenge, Logistics etc.

Preparation

- ORBATs
- Future History
 - Based on 2017/8 4* Wargames for Senior Military decision makers
 - Set in 2030
- Campaign Plans
 - Based on real world planning
- Game Design
 - Component Games
 - Play-testing – The challenges of integration
 - Time, scale, participants, location

Player Overview – 5 Hour Turn

Turn (One Week) = 3 Hours

Command

Strategic Intent

Resource Allocation to own Component

Planning

Fill in Intent Slides and Clarify Event Order for Adjudication

Adjudication = 2 Hours

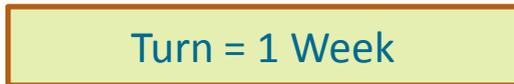
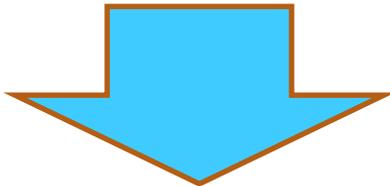
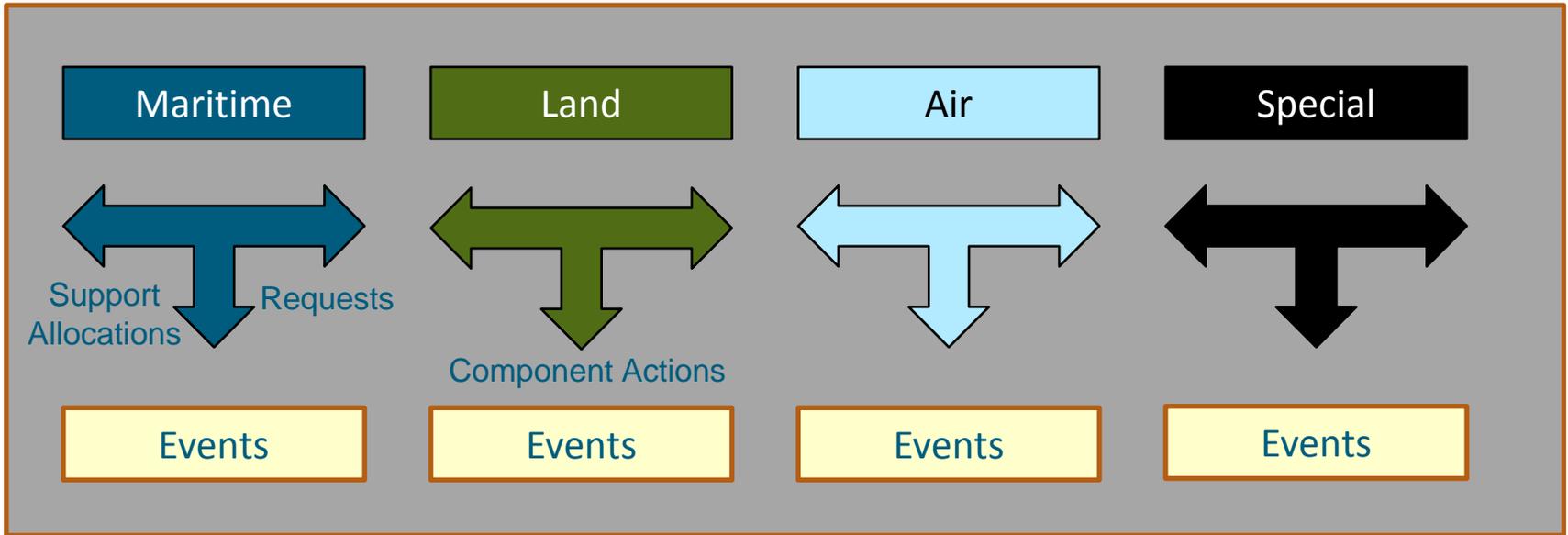
Planners

Resource Review

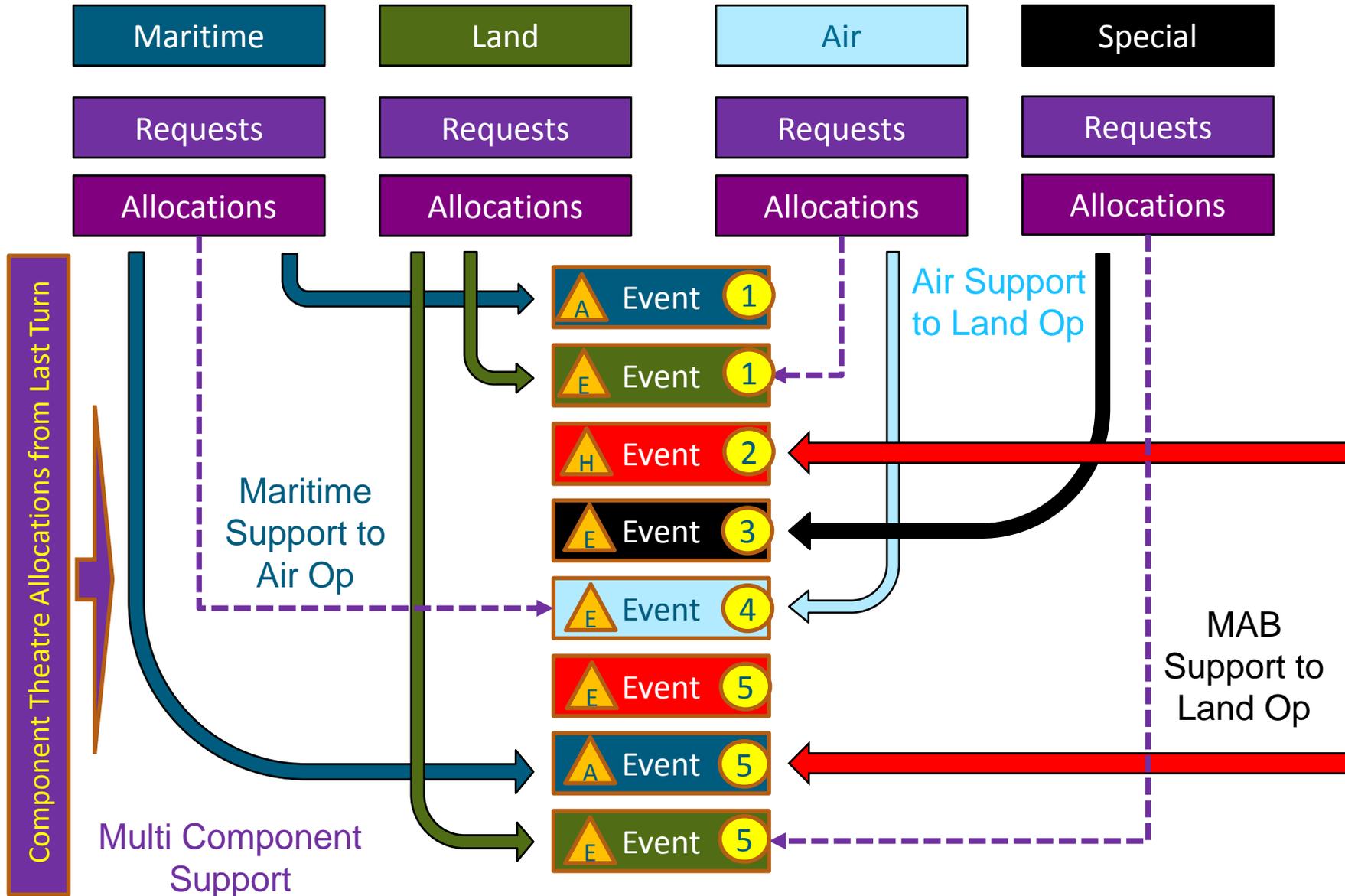
Theatre Resource Allocations
Directed Resource Allocations

Resource Allocation Requests

Simple Turn



Complex Turn – Support Allocations

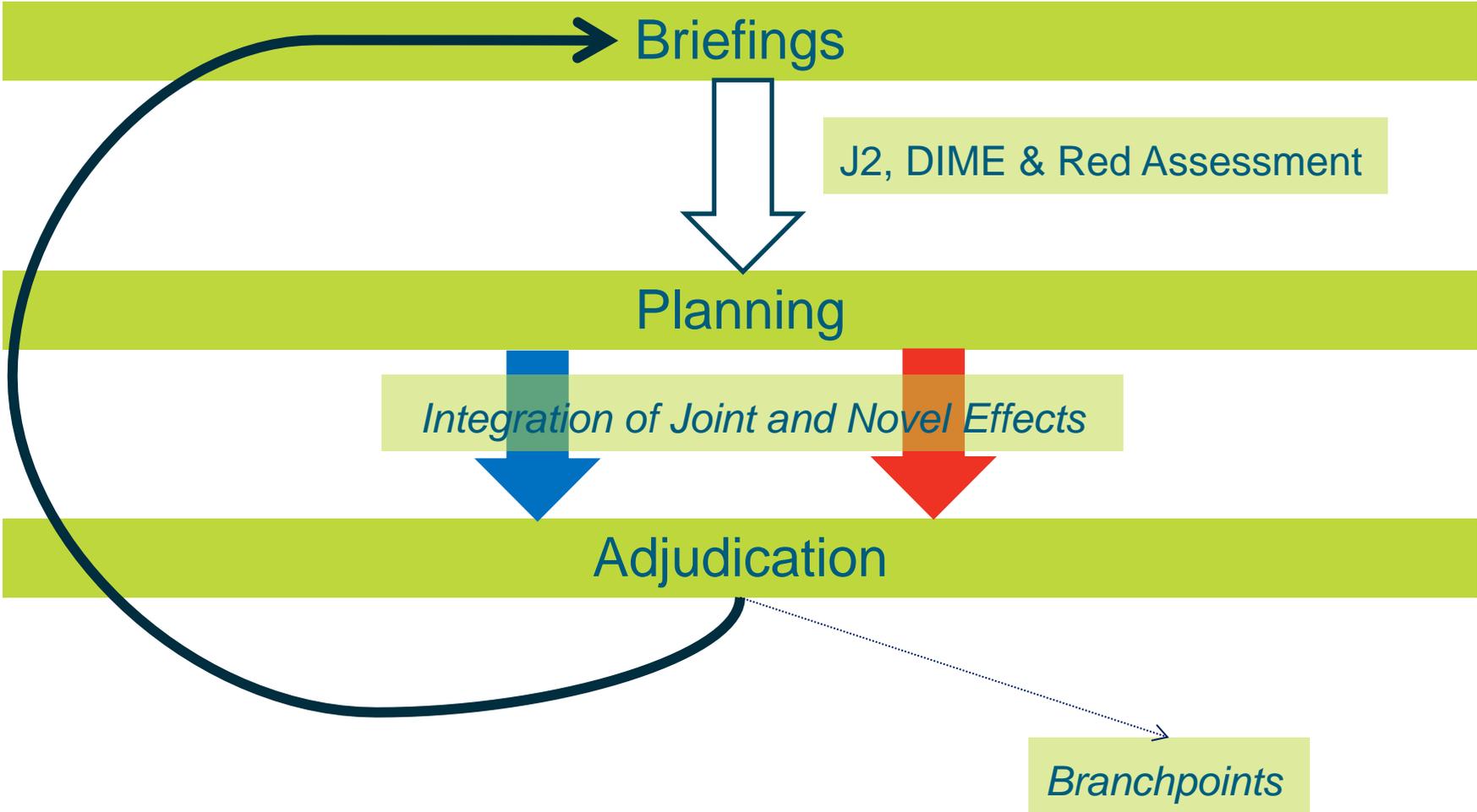


Challenges at Execution

- Semi-Closed
- Technical: Sharepoint, Simulation and Modelling
- Classification
- Integration of effects
- Workshops & Deep Dives
- Scale
- Real life support

Valuable lessons were learned, and the objective was achieved

The Main Execution Wargame



What did this look like?

- Days / Turns began with a high level brief to Blue Commanders, and the Senior Military Mentor
 - Briefings to planners
 - Initial intents, outline plans
 - Joint / Novel effects integration meeting
 - Planning continues
 - Adjudication tools prepared
 - Adjudication
 - Briefings prepared
- Typical days lasted twelve to fourteen hours

Sample Intent Data on JoA Component

Intent Summary

Aim:

Concept:

Main Effort Summary

Deliberate Operations / Major Activity

Routine Operations / Activity

Risks / Concerns

Policy / Capability Insights

Force Variation Testing Insights

Integration / Cooperation Insights

Scheme of Manoeuvre

Forces Laydown

Timeline with Turn / Phase / Week Indicated

STRAT Level Board - Example

High Level Effects	JOA 1	JOA 2	JOA 3
Weather	Rough Water	Freezing: -25C	Clear
Initiative	BLUE	Contested	RED
Intent	DEGRADE / DELAY	PREPARE / DETER	DEFEAT / DEFEND
Air	BLUE	Contested	Contested
STRATCOMMS	REASSURE / Victory inevitable	We are coming / Victory inevitable	DECEIVE / Victory inevitable
SPACE	FIND degraded by weather	FIND degraded Y%	SATCOM at Y%,
SF	DEGRADE	FIND	FIND
CEMA	FIND / UNDERSTAND	Preparing future action	FIND / UNDERSTAND
CBRN	Nil	Nil	Nil
CNI	CM strikes on...	X degraded by CEMA	Location DESTROYED

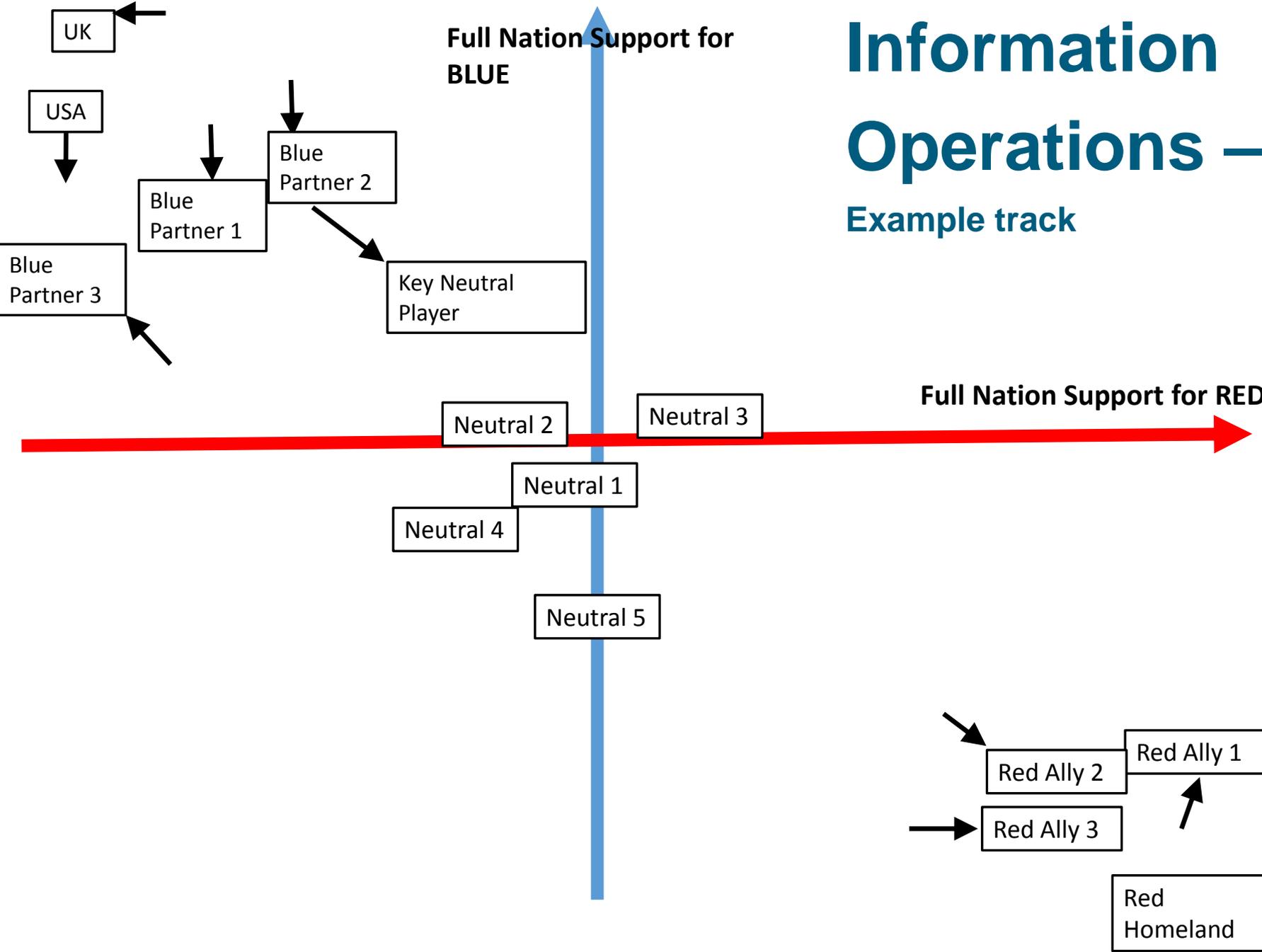
Component level adjudication

- Simultaneous
 - Physical and technical challenges
 - Synchronicity of action in time and space
 - Air
- Military mentors supporting adjudication
 - Decision makers not always available
 - Subject Matter Experts invaluable
- Impact of Joint / Novel and DIME effects

Information

Operations –

Example track



Key takeaways for a new Wargamer

- Manual – Flexible, adaptable, staff intensive
- Adversarial – Vital, but time-consuming
 - Semi-Closed: Complicated, but allowed for balance
 - Allowed for deception
- Chance – How to obtain player “buy-in”?
 - Primacy of player decisions vs External factors
- Importance of early customer engagement
 - Future visits / links planned
- Importance of Playtesting – Allowed problems to be identified and mitigated before the event

Analysis

What is happening now

Application of Wargaming & OA Techniques

Modelling and Simulation

A/S work

Wargaming as part of the decision making cycle

Summary – PFT 7 has set the conditions for a significant amount of high impact analysis for years to come

Questions?

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