Manual Wargaming Approaches at Dstl

Wargaming approaches used in Defence

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[dstl]

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Agenda

- Key Considerations
- Why Use a Manual Wargame?
- Levels of Wargame
  - Strategic, Operational, Tactical
- Types of Wargaming at Dstl
- Some Examples

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Introduction

Dstl uses wargaming to:

- **Explore potential future threats**
- **Explore challenges to the UK**
- **Test future technologies and potential force structures**

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Key Questions We Must Consider

- Is a manual wargame the best approach to the question?
- What resources will be available?
- What scenario/challenge will best explore the issues that need to be examined/understood?
- Will the military players be a representative team or full headquarters planning cell?
- How adversarial should the game be?
- How will the moves and insights be recorded?

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Key Planning Issues

- The study requirement should always be borne in mind during the game design phase.
- It should enable multiple courses of action to be considered.
- Where possible, experimental processes should be used to identify the optimum approach and to adjudicate results.

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Wargame Scope and Boundaries

- What are the key aspects of problem to be investigated?
  - These need to be identified and defined.
- The boundaries of the game should be clearly articulated.
- The rationale for the scope should be clear.
- The scope of the challenge being evaluated should be wider than the situation being tested.
- The out of scope areas should be clearly defined.
- The overall process design and the selected game mechanics should be simple and clear.

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Why Use Manual Wargames?

- Manual wargames are inherently flexible
  - They can even be specifically designed to facilitate HQ planning processes.
  - Computerised or stochastic (dice-based) moderation can be utilised.
- Intentions and insights can be continuously recorded.

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Faced with a bewildering array of challenges to evaluate, Dstl uses a wide range of wargaming approaches to answer project questions.

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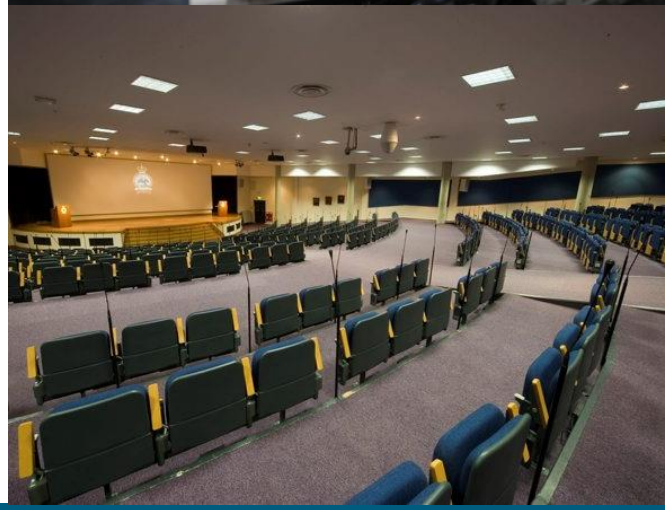
Levels of Wargames: Strategic

- Involve political level players and potential coalition partners.
- Always include diplomatic, economic and political factors.
- Used to evaluate how overall campaigns might evolve over a period of months.



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Levels of Wargames: Operational

- Few campaign challenges have one solution and the optimum way to evaluate the complex interaction of political and military factors is to run a series of wargames to see how events might unfold and how (and what) complications might arise.

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Levels of Wargames: Tactical

- These designed to test infantry tactics, techniques and procedures (TTPs).
- Tactical challenges create a number of intriguing issues for a wargame designer.
- Turns need to be flexible and psychological factors need to be included as they are crucial to success.

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Types of Wargames: Seminar

- Discussion based, designed to explore identified challenges.
- Uses Red Teaming and Military Judgement to inform the analysis.
- Can include considerable preparation and detail but do not use dice or computers.

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Types of Wargames: Thematic

- Bespoke events looking at potential technologies/new tactics.
- Limited vignettes are introduced to the players to stimulate discussion.
- An active Red Team provide an adversarial element.
- Adjudication tends to be done by Subject Matter Experts.
- Insights are used to refine the concept or to evaluate utility.

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Types of Wargames: Experiential

- Used to explore challenges where the player's reaction to unfolding events is more important than the end-state.
- Examples include wargames designed to evaluate how the emergency services and the general public might react after a crisis (a Cyber or unconventional terrorist attack).

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Types of Wargames: Exploring the Future

- These are set 20 years in the future
  - Stage 1 - Trends and Shocks
  - Stage 2 - Wargame Development
  - Stage 3 - Conceptual Force Wargame
- Aim of the first two stages is to gather (international) military, civilian Subject Matter Experts and Planners to develop a range of optimised / illustrative wargame scenarios.

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Examples of Support to UKHQ Planning

- Dstl also supports wargames (including CoA evaluation) conducted in deploying and deployed HQs (both in theatre and on exercise).
- Commanders need to test plans and explore options. A range of wargaming tools are used to support their HQ staff.

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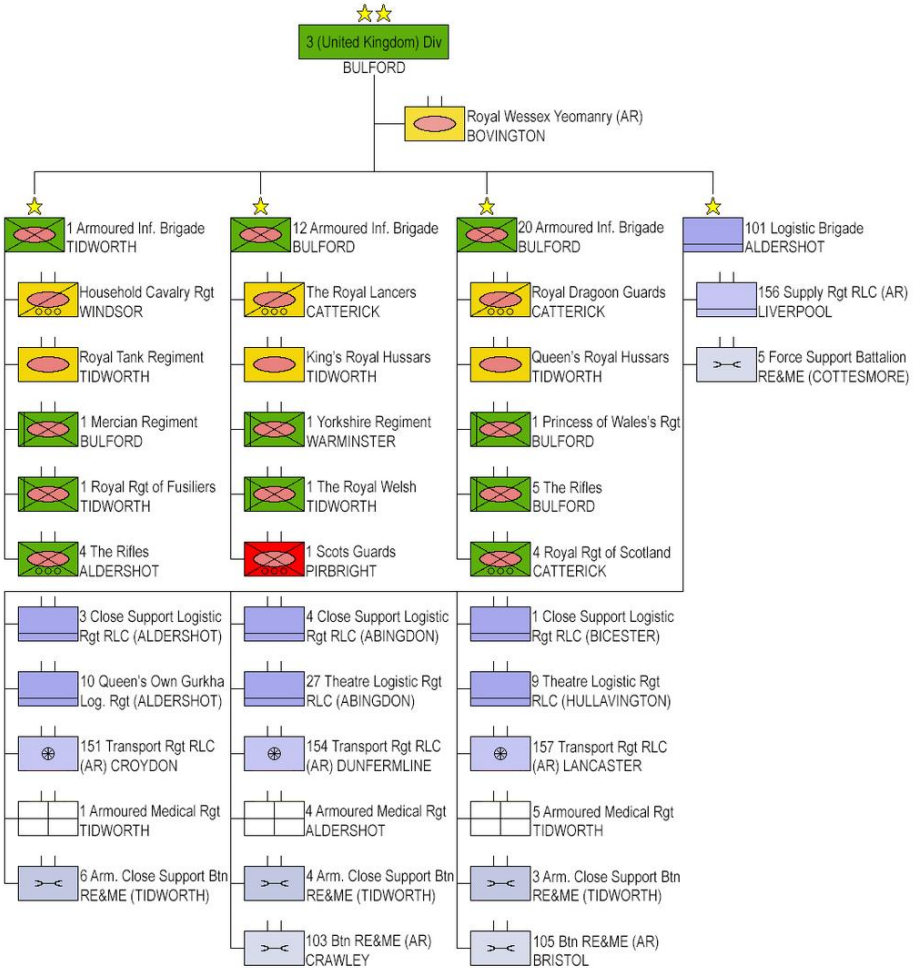
HQ Example: Dstl/RCAT on Exercise

- This September Dstl is supporting HQ 3(UK) Div's annual exercise using RCAT.



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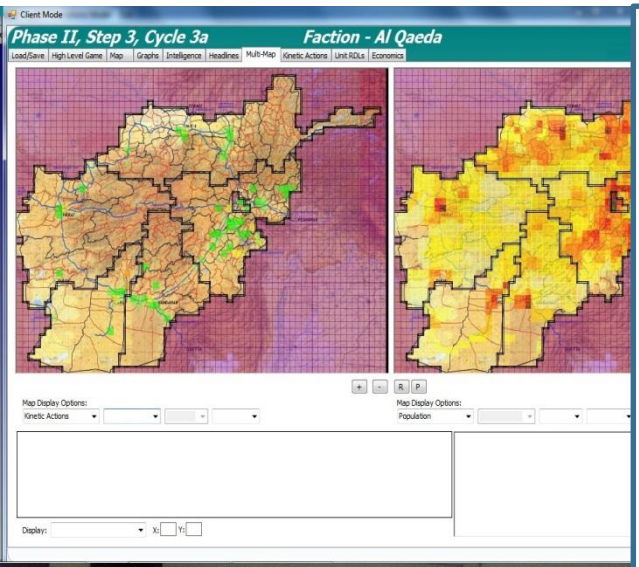
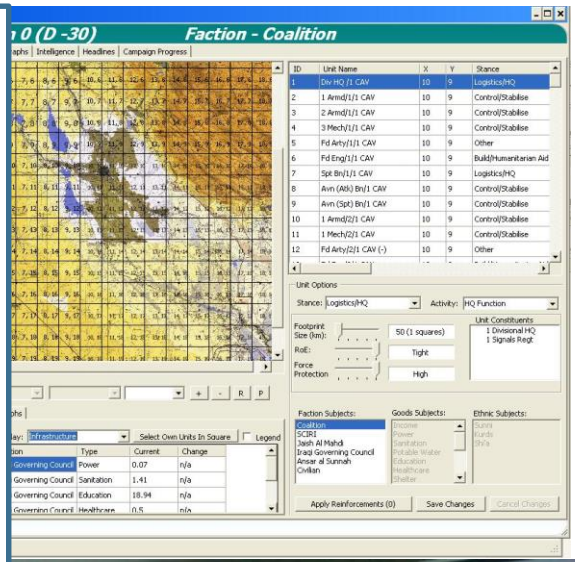
HQ Example: Computer Assisted Synchronisation



"The event added real and tangible value and the outcomes have informed planning and decision making at a decisive period of the campaign."

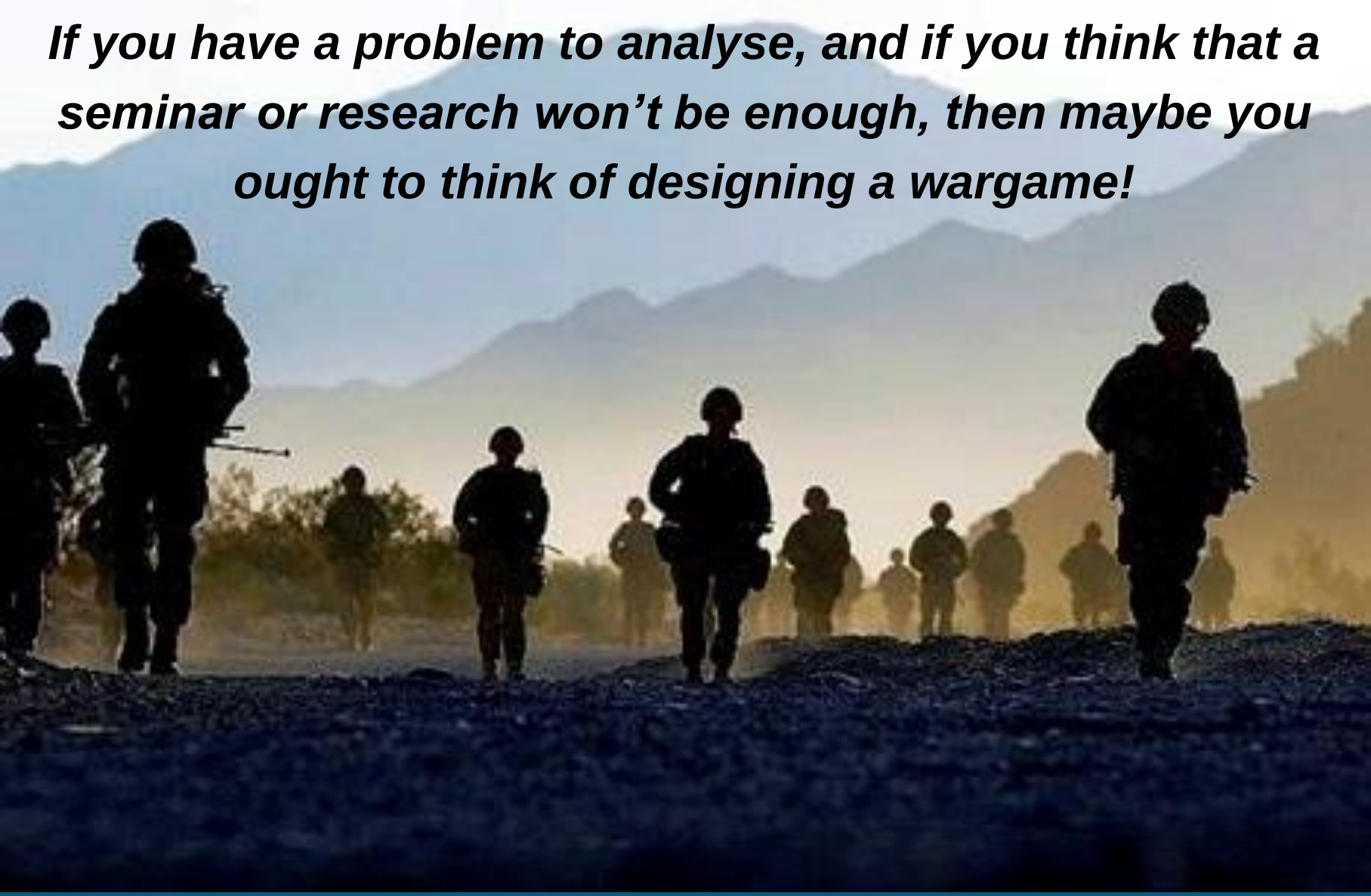
"The team's thorough preparation to accurately model the current Afghan environment and the campaign was of enormous value and I am convinced of the benefits it brings the review process."

General David M. Rodriguez, Commander, ISAF Joint Command



PSOM

If you have a problem to analyse, and if you think that a seminar or research won't be enough, then maybe you ought to think of designing a wargame!



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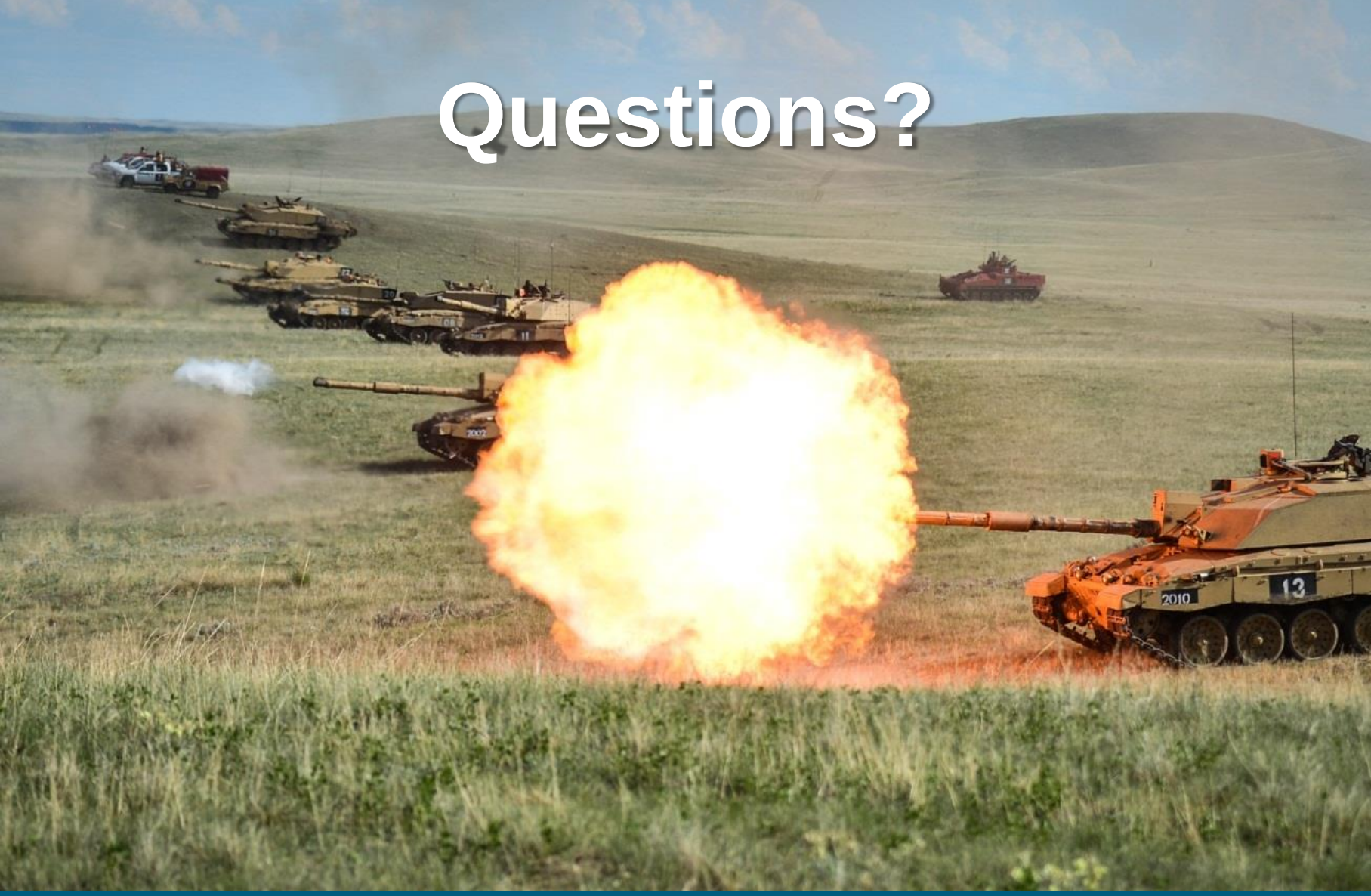
Questions?



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