



Cyber & Specialist  
Operations Command



# Defence Experimentation and Wargaming Hub

## The Analysis-Led Wargaming Framework



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# The Defence Experimentation and Wargaming Hub and the Analysis-Led Wargaming Framework

The UK Cyber and Specialist Operations Command (CSOC), formerly UK Strategic Command) officially opened its Defence Experimentation and Wargaming Hub (DEWH) on 21 March 2024; its purpose being to enable UK Defence “to make better decisions, faster and with greater confidence”. The ‘whole force’ DEWH team includes a uniformed leadership and wargaming component, an embedded team from the Defence Science and Technology Laboratory (Dstl), and the Core Wargaming Services (CWS) team provided by BAE Systems TECHMODAL, which is also the route to market to DEWH’s wider industry and academic supply chain.

DEWH is concerned with strategic ‘wargaming’ for analysis. Tasks span Joint Warfare (JW), JW + Partners Across Government (PAG), and geo-political issues. Wargaming for analysis spans a spectrum of decision support activity from the Facilitated Discussion (FD), through Tabletop Exercise (TTX), Enhanced TTX (TTX+) to the full adversarial Wargame (WG).

DEWH has created a strong reputation in a short period of time for delivering exploitable outputs, rapidly, and has several notable successes. This includes directly informing the recently published UK Strategic Defence Review, UK Defence Industrial Strategy and Prime Ministerial-level international dialogue on the most sensitive of UK/US defence and security issues. Key to this has been the adoption of an “analysis-led” approach to commissioning and designing wargames via an Analysis-Led Wargaming Framework (ALWF) and its supporting protocols, methods and tools. This document summarises the origin and developmental state of the ALWF.



First Sea Lord opening a naval wargame at DEWH

# Origins and Rationale

The ALWF began as a concept developed by BAE Systems as part of their bid to provide the CWS element of DEWH. This concept was built on a thorough review of the literature on the inherent 'pathologies' (i.e. in-built challenges) of wargaming and observed classical approaches to wargaming.

This suggested that:

- War, and the provision of Defence and Security, is an essentially human activity. It is pursued by humans, for humans. This social (or human) element needed to be better reflected in the design and delivery of wargames.
- The primary purpose of an analytical wargame should be to develop, capture and collate data for subsequent analysis. It is the exploitable findings or output of wargaming that is most important, not the wargaming activity itself.
- The UK Defence and Influence wargaming handbooks offer valuable 'high-level' guidance. A fuller treatment of social-science methods, and the mitigation of wargaming pathologies, enhances the wargaming for analysis guidance.

Consequently, work was commissioned to explore how social science research methodology and methods might be incorporated into an 'analysis-led wargaming lifecycle' to increase intellectual rigour and to address known pathologies. This work included a formal review of a campaign of wargames which highlighted the requirement for analysis to be an integral part of the wargaming lifecycle.

Thus, a "whole-of-lifecycle, analysis-led design approach was proposed; an evolution of 'current best practice' to embed analysis as the primary function of a DEWH-delivered wargame. The methodology compelled the requirement to generate sufficient, relevant data drives the wargame design; and not vice versa".

Collaboration and further concept development with Dstl and terminology changes lead to the current ALWF which includes an "Exploit" and "Refine" function and a change of name to "Analysis-led Wargaming Framework" as a better reflection of what the approach seeks to do.



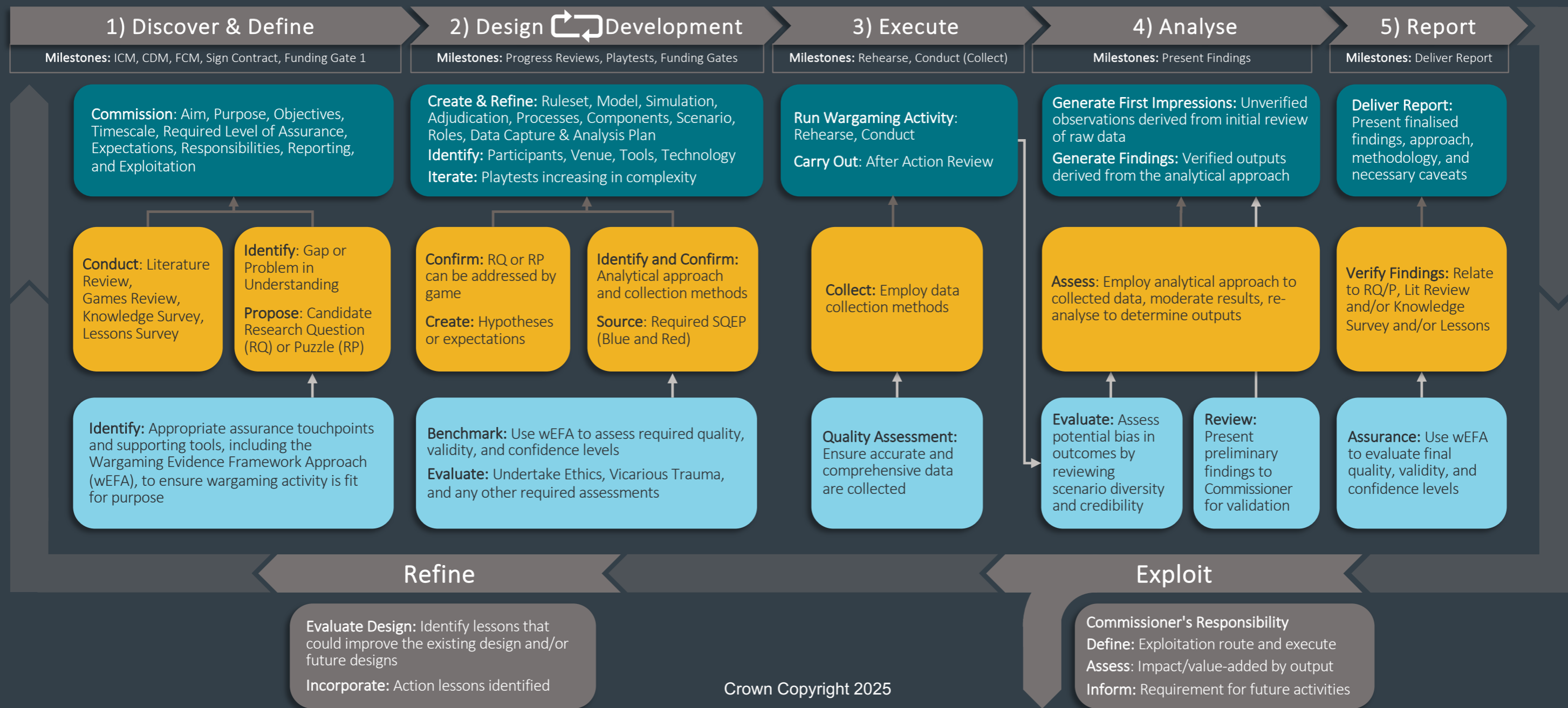
Defence Experimentation and Wargaming Hub - Outside building



Multiple disciplinary military / civilian teams working collectively at a DEWH wargame

# Analysis-Led Wargaming Framework in Outline

The Analysis-Led Wargaming Framework (ALWF) is structured around five main stages – Discover and Define, Design and Development, Execute, Analyse, and Report; and two supporting functions – Exploit and Refine



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Delivery Activities
  Analysis Activities
  Assurance Activities

**Note:** Some activities and milestones may only apply to large-scale wargames

## Stage 1: Discover and Define

This stage, which may be iterative, focuses on understanding the Commissioner's intent and clearly defining the wargame's purpose. It involves using a 'commissioning protocol' which contains a set of questions to be answered through engagement with the Commissioner and a review of the existing knowledge base. The objective is to establish a well-scoped requirement grounded in both stakeholder needs and relevant context. This phase results in definition (or fine tuning) of:

- The wargame research question, aim, purpose, objectives and desired outcomes, and likely exploitation route.
- Roles and responsibilities of both the Commissioner (and his/her organisation), and of DEWH.
- The above is captured in a 'Commissioning Contract'.

## Stage 2: Design and Development

Wargame design and development is an iterative process in which the Lead Designer works very closely with the Lead Analyst. It is aimed at producing two key outputs: a fit for purpose wargame model and a supporting Data Capture and Analysis Plan (DCAP). Both are tested and refined through structured playtesting and are formally approved by the Commissioner. Progress is marked by a series of Design Review Meetings, formal checkpoints that allow the Commissioner to track development across core lines of effort and provide feedback. These touchpoints ensure that the evolving design remains aligned with analytical and operational requirements.

## Stage 3: Execute

This stage involves delivering the wargame to participants, including the logistical setup, facilitation, and any necessary rehearsals. Execution is also the point at which data is actively collected, in line with the pre-agreed plan, to enable subsequent analysis. The Lead Analyst will work closely with the Lead Designer and Project Lead to adapt wargame execution as required to ensure that the desired data is surfaced.

## Stage 4: Analyse

Captured data is analysed using the methods outlined in the DCAP. The analysis assesses findings for potential bias and determines whether they meet the agreed thresholds for analytical rigour and confidence. Preliminary findings are shared with the Commissioner for validation and feedback prior to final reporting within 48-72 hours.

## Stage 5: Report

The final stage involves producing a formal written report of the findings typically within 2-4 weeks. This report includes appropriate caveats based on the outcomes of the assurance process, which also provides an assessment of the quality, validity, and confidence in the outputs. We are currently working to identify overlapping themes between wargames and to create cumulative insights.

## Exploit

The Exploit function ensures that the intended use of wargaming outputs, by the Commissioner or end user, is actively considered during both the design and analysis phases. This helps shape the wargame to generate actionable insights that are directly relevant to the wider Defence decision-making context.

## Refine

The Refine function embeds continuous improvement into the wargaming methodology. It captures internal lessons identified during each activity and feeds them into DEWH's operating model to strengthen future wargames and wargaming practice.



Two multinational military officers discussing views over a chart

Each of the 5 stages is underpinned by 3 concurrent and mutually reinforcing lines of activity:

### Line 1

#### Delivery Activities

These activities produce outputs that are directly for the Commissioner. They span the full lifecycle of the wargame: from the initial Commissioning Contract, through the development of the wargame model and its components, to the delivery of the event and the production of the final report.

### Line 2

#### Analysis Activities

This line focuses on shaping the wargame around the core analytical question. It involves defining what question needs to be answered, selecting the appropriate analytical methods, and identifying the data requirements the wargame must meet. These activities ensure that the wargame model is designed to generate the right data in support of the chosen analytical approach, making the process genuinely 'analysis-led'.

### Line 3

#### Assurance Activities

Assurance is embedded throughout the life-cycle, not just applied at the end. These activities verify the rigorous application of analytical methods and assess the quality of outputs at each stage. Continuous assurance safeguards both the integrity of the wargame and the credibility of its findings.

DEWH is now developing a Minimum Viable Product (MVP) which provides the basic, protocols, tools and methods to support the functional implementation of the ALWF in day-to-day wargame delivery. In due course, it is expected that the ALWF and a 'generalised MVP' becomes the UK Defence standard.



Wargame in progress on the DEWH tactical floor



# Integrated Warfare Centre, Who are we?

The Integrated Warfare Centre (IWC) provides campaign focused Warfare Development support to UK and NATO Commanders against near-term operational challenges and opportunities. It drives optimisation, adaption, and integration of the existing Integrated Force, through close, collaborative engagement with the Domain Warfare Centres.

*Warfare Development is improving military capability and its effective integration within the current force, and with allied forces, in the near-term (years 0-3).*

The IWC is responsible for driving operational insights and lessons into force development and campaign planning. Exploiting operational research and wargaming, alongside PJHQ and Defence Digital, DE&S, Dstl and other delivery agencies. The IWC plays a key role in adapting current Defence capabilities through innovation and spiral development.

This informs UK and international collective training and experimentation opportunities, and rapid development of NATO and UK doctrine.

## Our priorities

**1** Support to Joint Commanders

**2** Support the Strategic Centre

**3** Route to STDE27 through 2025 and 2026

**4** Build the 'IWC Machine'

## Our End State vision

A fully trained, integrated, and capable force that delivers Joint Conceptual Development (CONDEV) and Warfare Development (WARDEV) priorities in support of Joint Commanders, Cyber & Specialist Operations Command, and Allies at the joint and operational levels.

## Our Mission

To optimise and adapt the current integrated force, through concepts and warfare development, supporting UK and NATO joint commanders to achieve operational advantage over adversaries, across the continuum of competition.





## **AVM Simon Strasdin CBE MA** **Director Integrated Warfare Centre (DIWC)**

The threats we face now are more serious than at any time since the Cold War. The ability to learn, adapt, innovate, and integrate across domains as part of a NATO force is more critical than ever before. The **Integrated Warfare Centre (IWC)** stands as the fourth arm in our network of warfare centres, complementing and linking the expertise of Land, Maritime and Air & Space, as well as NATO's Joint Warfare Centre and the emerging Cyber Electromagnetic command.

Modern conflicts demand seamless integration across all domains, and IWC strengthens our collective warfighting readiness by exploiting lessons, integrating with allies, developing doctrine, driving joint experimentation, wargaming, delivering individual and collective training.

*At IWC, we equip military leaders with the knowledge, skills, and adaptability needed to prevail against adversaries in complex and contested environments.*

**Our purpose is clear: To optimise and adapt the current integrated force, through concepts and warfare development, supporting UK and NATO joint commanders to achieve operational advantage over adversaries, across the continuum of competition.**

Since modernisation has no endpoint, an **adaptive mindset** is crucial, accepting and managing risks as necessary steps toward transformation. **Standing still is not an option.** To stay ahead, we must harness **creative thought** and embrace an **innovative approach**, drawing on a rich blend of industry, academia, allies and our civil servants, reservists, and regular military personnel, supported by expert contractors.

We are proud to serve as a hub of **innovation and collaboration**, where joint and multinational expertise come together to build stronger, more resilient forces. Our commitment remains steadfast: to ensure that the Current Force is fully prepared to succeed against our adversaries.

Our approach prioritises **evidence-based decision-making**, accelerates capability development, and sharpens **deterrence and readiness to warfight.**

**Together, we are stronger – united in purpose, ready for the challenges ahead.**

**AVM Simon Strasdin CBE MA**  
**Director Integrated Warfare Centre**



Military personnel on exercise working at desks



Cyber & Specialist  
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