



# Insights from the main execution phase of a large-scale multi-domain wargame

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A large-scale analysis exercise, **aiming** to

- test and evaluate the ability of IF30 to conduct a multi-domain, **medium scale intervention** against a major state actor
- generate **evidence** on the strengths and weaknesses of the **force structure**,
- develop **insights** into current and **planned capability**.



# What is Planned Force Testing for?

One of the key analysis processes for Defence

Large stakeholder base:

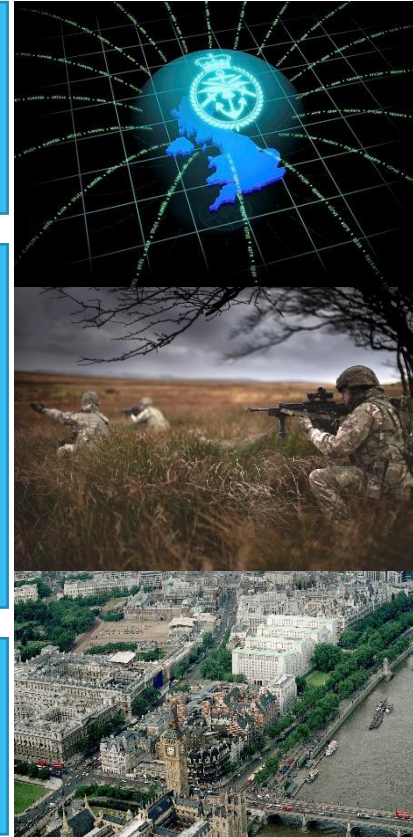
- X-MOD
- X-Command
- X-Whitehall

Develops scenarios for future analysis

- Generally examines a single scenario in detail.
- Develops insights into force structure, capability risks, and opportunities.
- Provides a coherent, and common, scenario context for Defence, inc Dstl, for further exploitation.

Grown from a “background task” into work that reaches the highest levels of Defence and HMG

- PFT7 briefed to No.10
- PFT8 had direct involvement from the Vice Chief



- Investigate the strengths and weaknesses, and dependencies of Defence's force elements and capabilities when operating across the 5 domains, including readiness levels and support requirements.
- Analyse the capability and capacity risks and opportunities to UK forces.
- Identify any difference between the planned force structure and that required to deliver medium scale operations.
- Testing future concepts of multi-domain integration

# Main execution phase

- ~130 staff
- Over a hundred participants from across UK Defence and wider government institutions, representing the full five domains – Land, Air, Maritime, Space, and Cyber - as well as broader political interests.
- Attendees from the USA.
- Ten long days.
  - 8 am briefing through to night time
- Serge data capture tool.
- ~1300 kit-kats



- Defence College for Military Capability Integration – Battle Lab at the Defence Academy, Shrivenham

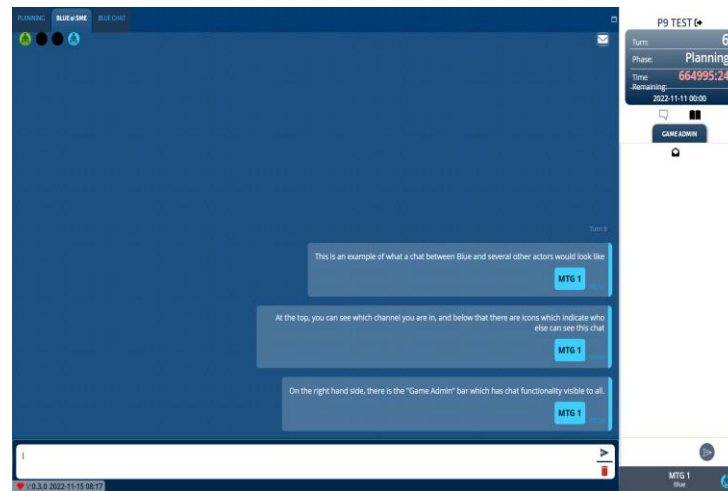


# Daily Battle Rhythm

## Daily Battle Rhythm



- SERGE (Serious Gaming Evolved) – Data Capture & Communications
- Data capture tool and player interface
  - Order generation
  - Communications between cells / roles
  - Anonymous insight capture function



# Serge Usage

## For players

- Relatively intuitive format
- Able to get players up and using it with relatively little initial training
- Some need to retrain players on specific issues as these were encountered

## In adjudication

- Generating interactions between orders
- Hundreds of actions/ interactions

PLANNING BLUE or SHIP BLUE CHAT

Show orders for turn: All turns

Orders

Reference	Author	Title	Activity	Start Date	Finish Date
Blue-1 (Turn 6)	MTG 1	the title	Land-Cruise Missile Strike	110000Z	110000Z

NEW ORDERS

Asset	Quantity	
Blue:49	0	Delete

Add Asset

Actions On

If there are any 'Actions On' that you wish this unit to take.  
e.g. "If engaged by Enemy aircraft, then do this", "If detected by enemy AD, then do this."

Supports High-Level

If this activity is supporting a higher level mission or effect - write it in here

Activity Card

If supported by Space/CEMA - write it here

Activity Description

If required, give more description about the activity being conducted here

Observation Method

For (STAR - if using a specific sensor type, in

Duration (Hrs)

0.3.0 2022-11-15 08:17

SEND MESSAGE CANCEL

P9 TEST

Turn: 6

Phase: Planning

Time: 664994:29

Remaining: 2022-11-11 00:00

GAME ADMIN

MTG 1

# Serge Usage

PLANNING BLUE SME BLUE CHAT

Show orders for turn: All turns

### Orders

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Remaining: 2022-11-11 00:00

GAME ADMIN

MTG 1 Blue

# Serge Issues

- Technical teething issues
- Trimming the data bases
- Night-time slow downs
- Interactions which had to be manually skipped
- Might benefit from an automated filtering process

PLANNING BLUE 6-SME BLUE CHAT

Show orders for turn: All turns ▾

Orders

<input type="checkbox"/>	Reference	Author	Title	Activity	Start Date	Finish Date
> <input type="checkbox"/>	Blue-6 (Turn 6)	MTG 1	Input a Title for the Orders Here	Land-ISTAR	110000Z	110000Z
> <input type="checkbox"/>	Blue-1 (Turn 6)	MTG 1	the title	Land-Cruise Missile Strike	110000Z	110000Z
> <input type="checkbox"/>	Blue-2 (Turn 6)	MTG 1	Blue Transit	Land-Transit	110400Z	111200Z
> <input type="checkbox"/>	Blue-3 (Turn 6)	MTG 1	asdfas	Land-EW Attack	110000Z	110000Z
> <input type="checkbox"/>	Blue-4 (Turn 6)	MTG 1	Pending asdfa	Land-SAM MEZ	110000Z	110000Z
> <input type="checkbox"/>	Blue-5 (Turn 6)	MTG 1	Big strike	Land-Ballistic Missile Strike	110000Z	110000Z

♥ V.0.3.0 2022-11-15 08:17

P9 TEST ↵

Turn: 6

Phase: Planning

Time Remaining: 664995:58

2022-11-11 00:00

GAME ADMIN

MTG 1  
Blue

- CEMA and SOF handled in a more bespoke manner
- Handled at S-level, focussing on the effect
- Cyber cards with results determined by SME judgement - Handled at S-level
- SOF worked through with specialists using the four box-method



- Clarity of post-adjudication briefings.
- Briefing *to* the audience.
- Being present
- Sitting in planning sessions / talking to the inputters



- Individual player agendas
- Single actions such as a unit travelling to fire a single missile
- Information Ops area effects
- Need for building in more munition equivalents



- Early heads up
- Pre-adjudication (where possible)
- Four box method
- Gap between spreadsheet plan and usage
- One evening largely manually adjudicating



- Analysis is underway from the data and vignettes generated by PFT IX
- Process has already started again for PFT X





# [dstl] The Science Inside

Discover more

