



UK Resilience Academy

Wargaming in a Resilience Context

UK Resilience Academy Insight Paper

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Introduction

Challenge, failure, and stealing from the military are exactly what UK resilience needs in 2026.

Exercising is an essential part of preparedness in UK resilience. It exists to give a rigorous test to our plans, and help give participants some experience for when a real-life incident occurs – along with one of the most valuable reasons for exercising, “making friends before you need them.”

However, UK exercising culture is not unified in its approach to testing and training. What’s written here is intended to provoke further thoughts and discourse, whether in favour or disagreement, to further pursue best practice for when the on-call duty phone rings.

If you’d like to know how this can go beyond words and into actions, read on.

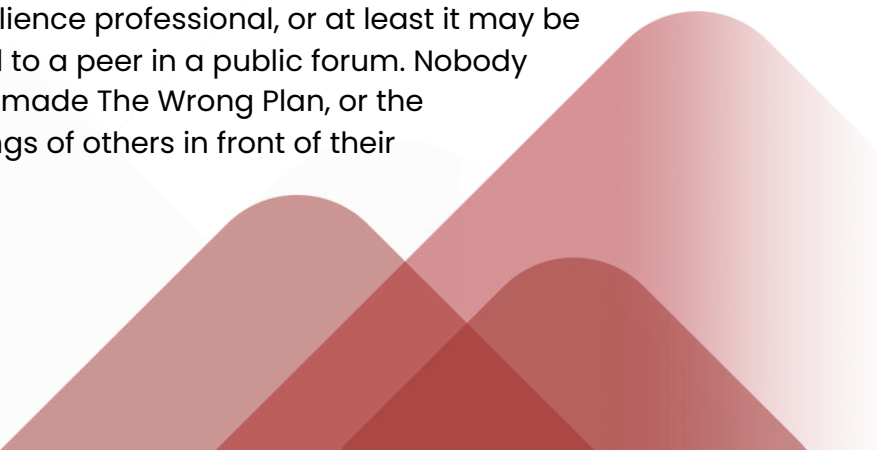
Scenario A

It’s a summery Thursday afternoon, around 3pm, and you’re at a tabletop exercise about flooding incidents in a multi-agency setting. A PowerPoint presentation takes you through the scenario, step by step. There are a lot of opinions in the room: about the exercise location (convenient-ish), the room (too small), the windows (why don’t they open?), the biscuits (not as good as the ones from last time), and the aircon (unforgiveable in its absence).

You’re there to run through the plans for response to a flooding major incident, and that’s something people are less vocal about finding a problem with. The details are missing in some places which aren’t deemed relevant, and if anyone asks about this, they are gently deflected with the comment “don’t fight the exercise.”

The exercise follows a neatly scripted narrative with the slide deck unchanging in the story it delivers for participants, and there is no chance of them encountering challenges like crossed wires with communications, how the plan interacts with other processes, or much in the way of insightful learning outcomes.

You are all the people who wrote the plans, or they’re your colleagues you see semi-regularly, and you get along with them for the most part. Finding a flaw or pointing out how elements may interact poorly with other processes is surely a personal failure, and an attack on your ability as a resilience professional, or at least it may be viewed as being unnecessarily critical to a peer in a public forum. Nobody wants to be that person; the one who made The Wrong Plan, or the troublemaker who points out the failings of others in front of their professional equals.



Scenario B

It's still summer, still the afternoon, and you're still discussing flooding responses.

The location is still fine, the aircon is still rubbish, and the biscuits still aren't the fancy ones from the last meeting. However, this time, those opinions all fade into the background.

You've been working through the plan as though the floods were underway at present, with an introduction slide deck that set expectations for the day. This is an exercise which responds to what people do, with capabilities they might plausibly have available on the day.

Scenario injects are delivered to participants and pretty early on, someone points out that the flood water is moving towards a housing estate. There was an agreement to update them once every five years, whilst the flood plan is updated every three years, and the maps don't incorporate a new industrial park and how it impacts the local community.

There is no scripted slide for this, but there is a subject matter expert available for both flooding and the local authority. They had jointly planned an inject to be shared on the estimated flooding impact to local residents – but now it can be quickly amended based on the conversations that are taking place, and the actions participants may choose.

Someone suggests door-knocking as a fast way to inform people, but boots on the ground could be an issue. Where would they be mobilised from? The flood plan is consulted, and it says police should lead on it. The police participants look at their resourcing levels for the day, represented by laminated card tokens which reflect realistic capabilities (with numbers taken from their force rostering unit), and share that they are already stretched with response to a motorway RTC caused by the adverse conditions, and a search for a missing family who were camping in an area that has since flooded.

Fire and Rescue are also heavily engaged, and are trying to work out whether they can spare some resources for a mutual aid request over the county border. This is a time-critical request, and if they aren't able to decide within the next five minutes, it will be too late. The fire participants are also mindful that if they share resources, they may not be back any time soon. The small card token weighs heavily in their hand.

This still hasn't resolved the door-knocking question, and whilst voluntary agency support has been mentioned, nobody is sure of the immediate activation mechanism. Someone has been sent to find out more from the local authority participants, but it is taking time and a facilitator has just produced an inject. It is about scared and angry social media posts from residents of the housing estate, as floodwaters begin to encroach on their community.

You share a pointed look with the person next to you. When you were reading through the flooding plan as a group, it was noted that the maps were outdated but it was considered to be an acceptable risk.

The approach

It is a lot easier to return to your organisation and say 'we tried the plan, and there's a problem,' than it is to say 'we went through the plan, and the person from Organisation A thinks it's bad'.

One is a scenario in which the group has collectively discovered the issues through active exploration of the plan, and the other feels like a criticism. Group discovery lends the findings weight, and removes the personal element. A problem with your plan is no longer an individual inadequacy, but something to be solved. This helps create a safe-to-learn, also called a safe-to-fail, environment.

Now how do we incorporate this into resilience exercising? How do we help create those safe-to-learn environments that also introduce challenge?

That's where stealing from the military comes in. They have their own ways to exercise plans and train people, and all the resilience sector needs to do is quietly take the bits that will work for us. This is how we do wargames without war.

The Ministry of Defence Wargaming Handbook openly states that "there is no single, commonly accepted, definition of 'wargaming'," ^[1] and this flexibility provides resilience professionals with the opportunity to cherry-pick best practice for exercising without the content being too adversarial – and even then, it's also noted that when it comes to wargaming, "war itself frequently does not feature." ^[2]

The definition of wargaming used by the Ministry of Defence only needs a small change to make it relevant for our purposes:

"A scenario-based ~~wargame~~ model in which the outcome and sequence of events affect, and are affected by, the decisions made by the players." ^[3]

The aim for an emergency planner, business continuity practitioner, or any related or adjacent area should be that "exercises are realistic, including... consequences for decisions and actions taken and the timescales and levels of resources available." ^[4] This is also supported by the UK Resilience Academy's Exercising Best Practice Guidance when it lists the principles of exercising, including that they be both realistic and challenging. ^[5]

^[1] MoD Wargaming Handbook, p.5

^[2] MoD Wargaming Handbook, p.39

^[3] MoD Red Teaming Guide 2nd edition, p.29

To further emphasise non-conflict domains still benefiting from a wargame approach, when using a wargame-inspired framework for cyber security purposes, Schwartz et al. noted that “unlike conventional wargames, resilience games do not prioritise conflict outcomes. Their focus is on sustaining system functionality under stress rather than achieving battlefield victory.”^[6]

Many UK exercises currently provide an awareness of content for participants, but it is when consequences are modelled in that things become more rigorous – both for the people taking part, but also the systems they’re testing.

Is a game, or play, professional?

You don’t need to call it a ‘wargame’, even if it feels like one.

You may not have been to a ‘wargame style’ exercise, but maybe you’ve encountered a ‘dynamic exercise’, ‘red teaming’, ‘stress test’, ‘challenge tool’, ‘crisis scenario’, or a ‘resilience game’. The content is not materially changed by what it’s called, only the perception of it.

A wargame can be an exercise, and vice-versa. In the words of a prominent professional wargaming figure in the British military, what you call it doesn’t actually matter, as long as you’re consistent and it’s what the person in charge wants you to call it.

When you hear about ‘learning through play’ it’s usually in the context of Scandinavian infant schools with small class sizes (they probably have great biscuits. Or cardamom buns.) It sounds fun, or as you may say to sound more serious in front of your colleagues, “professionally satisfying.”

What play actually offers is the opportunity to explore new concepts, experiment in a low-stakes, safe-to-fail environment, and consider creative approaches to familiar problems. This is not something that is habitually encouraged within resilience, but there are undoubted advantages to having a space for everyone from strategists to practitioners to be curious, innovative, and challenging.

This means benefits not just for exercising and testing plans and responses, but also training for those who would be involved, as they gain confidence and understanding of what’s needed in a real-life situation.

^[4] What components of emergency preparedness exercises improve healthcare practitioners’ emergency response learning? 4.1 Implications

^[5] Exercising Best Practice Guidance, p.5

^[6] Access Denied and Sector Down: Introducing Resilience Games for Critical Infrastructure Preparedness, 3.1 Resilience and Wargaming

Half the time, a 'wargame' isn't even a game as you may recognise it, and there is no single method through which a wargame is delivered. There are multiple formats which can be used to suit the needs of the situation. Some may be multi-day affairs with months of preparation, and some can be asked for at 9am, and delivered just after lunchtime on the same day.

It is often about teaching a way of thinking that is helpful, as much as it is how you get there.

Types and benefits

'Wargames' cover a spectrum of tools. A 'matrix game' is a framework for discussion and exploration of an emerging scenario, using the strength of participants' arguments alongside an element of chance to help show that even the best laid plans may go awry. A facilitator, or crowd-sourced adjudication from the other participants, helps steer the scenario. Sometimes the whole thing arrives at a meaningful conclusion within 60 to 90 minutes.

Examples:

Name	Subject
<u>Earthquake!</u>	Humanitarian assistance and recovery in the aftermath of an earthquake in the USA
<u>Hope and Glory 2</u>	UK homeland resilience in the face of domestic pressures and hostile state actors
<u>Reasonable Worst Case</u>	UK pandemic preparedness and response

'Serious games' using cards or boards are an adjacent but useful area to wargames. They can be run very quickly and help create spaces where anxiety around challenge or saying the wrong thing can be funnelled through the format of the game. Having a structured format to focus on reduces the concerns with pointing out flaws, and gives consistency in content for delivering lessons. They also do not require lots of resources to run and re-run.

Examples:

Name	Subject
<u>Neustart</u>	An urban environment suffers a national power outage for multiple days
<u>All Hands</u>	Flooding awareness and education in Scotland
<u>Are You Prepared?</u>	Incidents, preparedness and response intended for a younger audience

A 'megagame' is a format which may feel familiar to a tabletop exercise in some respects, but it often has 'teams' and time limitations. It may also involve physical components with which to represent resource levels, and some game mechanics to simulate elements of real life such as activation times, communication, and the difficulties of maintaining a constant high level of response. No other exercise type better simulates a pressured environment that needs decisions to be taken, and sense made from multiple and sometimes conflicting information sources. It is an ideal format for helping prepare people to become comfortable with discomfort in a crisis.

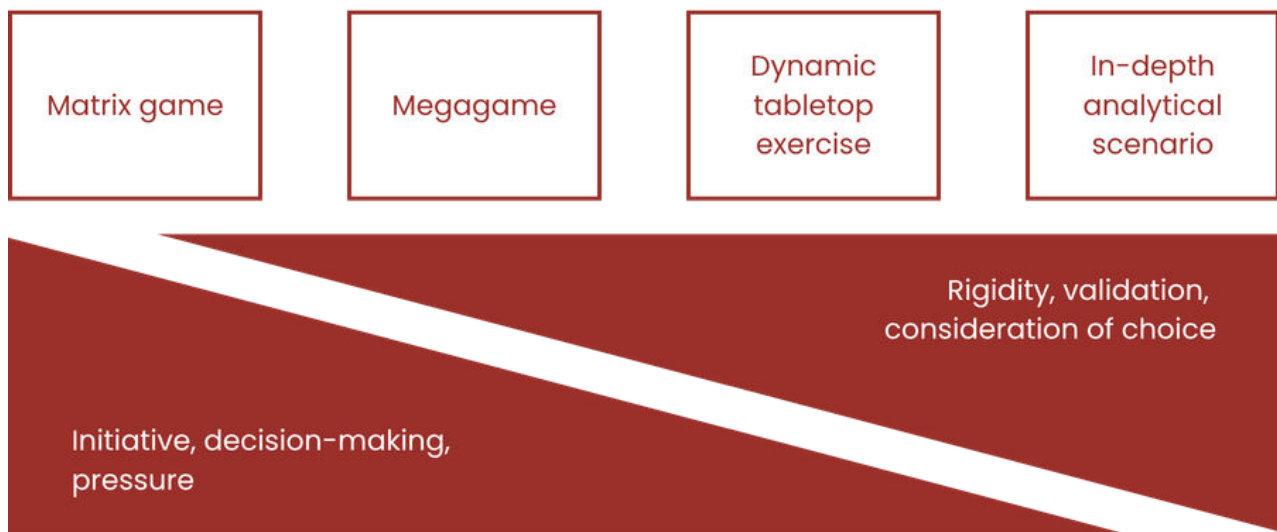
These can incorporate anything from twenty to three-hundred participants, and need a dedicated facilitation component which is briefed and trained, along with suitable preparation time. Many are delivered recreationally on historical and fictional topics, but they have their origins in Royal Military Academy Sandhurst in the 1980s.

Examples:

Name	Subject
<u>Green and Pleasant Land</u>	National level resource allocation and responses to incidents across the UK
<u>Unnamed Hospital Game</u>	Management of a fictional UK hospital trust
<u>King's College Exercise</u>	Modern geopolitical conflict and tension management

Other examples are available; committee games, disguised scenarios, kriegsspiels, and more besides – and many don't take place in isolation, but as a hybrid format of several types. The intended purpose will also inform what format is used, as some may be better at recording learning outcomes as training tools, whilst others might be suited more for meaningfully testing and validating response plans.

You may also be familiar with the Wargame podcast^[7]; this is an example of an adjudicated committee game at the strategic level. Besides geopolitics, consider how this format could also be used to simulate environments like corporate executive boards, or Local Resilience Forum strategic responses.



This diagram is an overview and should not be taken as definitive, but it does quickly illustrate broad trends that are applicable to differences in format (with thanks to Tom Mouat of the UK Defence Academy for his original diagram this is inspired by).

^[7]<https://news.sky.com/story/the-wargame-new-sky-news-and-tortoise-media-podcast-series-simulates-a-russian-attack-on-uk-13371462>

Now what?

There is a lot more to be said on using wargame-like approaches for exercising, training, and general validation.

They can be applied in different contexts beyond preparedness, response and recovery, looking at topics ranging from climate change to housing policy. Similar tools, including red teaming, can also be used when looking at foresight and horizon-scanning. Whilst not a predictive tool, they may still help inform considerations for the future, and provide a space for framing strategic thinking in the long term.

A key point to remember is that wargaming as an approach is not ideal in all circumstances and situations, and whilst it can be engaging and useful, it won't always be the right tool for the job. Even when it is what's needed, there need to be considerations around how it is used – what question is it trying to answer?

So, what happens next? Not everyone will have tried exercising like this, and that's understood. A lack of opportunity or knowledge can be fixed, with skills passed on and experience gained through opportunities to observe and facilitate. It is all down to you and your organisations to take that first step:

- **Try it out** – find a megagame or serious game to try, go on a course or attend an event with this content, and observe, or even better facilitate, at an exercise which embraces more challenging and reactive dynamic exercising.
- **Do it yourself** – run your own matrix game, get things wrong, and ask awkward questions which need to be answered with realistic capabilities. Find out how to write and run your own wargaming-style exercises, and if you don't have the capacity or the confidence yet, ask someone else to run one for you so you get a better understanding of it.
- **Talk about it** – this includes attending online talks and seminars, some of which may be delivered by the UKRA, but also find your peers who are curious and interested in taking their exercises further, as well as online spaces which look at these types of exercises (these are mostly blogs or LinkedIn).
- Look out for the new **National Exercising Hub** which will be coming to the UKRA website later this year. This will include resources for you to run your own exercises, including approaches similar to what's been talked about here.

To help lead the way, the UKRA is also currently working on its own exercising expertise and how it delivers these types of scenarios, as part of its wide range of offerings for improving resilience through challenge and validation.

With the right cadre of facilitators, in the right environment, and asking the right questions, we have a valuable tool for resilience just waiting to be used. It will need some amendments to current exercising culture, and a willingness to embrace new ways of doing things. These are not massive changes, and the means to undertake them are out there within national bodies, voluntary agencies, Local Resilience Forums, and the private sector, with people who can't wait to get to grips with a bit of a challenge.

Now we just have to see if resilience is willing to play the game.



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