

**Avengers: AI Swarming Competition Q&A**

Following the industry briefing call, Taskforce RAID is publishing written responses to the following clarification questions to support the preparation of submissions under our inaugural UK-UKR AI Partnership competition with UK industry. The deadline for submissions is 23:59 on Thursday 22nd October.

Clarification Question	Response
01. Are there EO/IR as simultaneous frames (e.g. taken at the same time)?	Only as part of the recording of a split-screen view.
02. If we were to compete as a UK entity, what could we share with the wider company, particularly our R&D centre which is overseas?	The AI model weights licensed through the Avengers Labs framework may only be used within the UK and Ukraine territories, in accordance with the relevant licence conditions. They should not be shared with third parties outside the scope of those licence arrangements. General knowledge, expertise, methodologies and know-how developed through participation may continue to be leveraged within your wider organisation, including overseas teams, provided no Outputs (AI model weights), platform data or other restricted material are transferred. Existing software, code, architectures, tools and other proprietary materials remain owned by the participating UK company. The ability to commercialise or reuse capabilities outside the original scope will depend upon the extent to which those capabilities remain reliant on licensed Outputs and any applicable Ukrainian and UK export-control requirements.
03. This was very informative on computer vision - can you provide any details on the distributed decision-making challenge, and what information the platform might be able to provide?	Distributed decision-making is one of the four problem areas listed under this competition and please refer to the description outlined in the published overview document. The platform does not hold data on decision-making or historical engagement outcomes. Its focus is perception: it provides labelled EO/IR data for training and evaluating perception models, which can provide the situational awareness that distributed decision-making systems build on.
04. Is it purely AI models that you are requiring or are computer vision solutions also accepted?	Both are accepted - on the platform you can tune AI model algorithms, alongside the hyperparameters of classical computer vision algorithms.
05. Are the labels standardised - so each asset type is labelled the same way as a standardised class?	Yes, all labels are standardised and versioned. The class taxonomy will be shared with the selected UK companies upon access to the Avengers Labs platform.
06. Does the dataset contain only EO/IR imagery, or does it potentially include other sensor modalities (e.g. SAR, LiDAR, RF)	EO/IR only at present. Other modalities (e.g. acoustic) are on the roadmap for future stages.
07. Can you confirm, will all data stay on the Avengers platform?	Correct; the platform encapsulates the data and provides APIs to work on it inside a secured sandbox the platform provides. The platform operates as a controlled development



	environment rather than as an unrestricted transfer of datasets.
08. Do you have a preference for the maturity of the innovation demonstrations for phase 1. i.e. is there a view of timescales for future stages in maturing and deploying full solutions?	We welcome innovative proposals that can demonstrate clear operational value to both Ukrainian and UK Armed Forces. The competition is intentionally open to a range of maturity levels, provided proposals present a credible route towards operational utility.
09. Is there more information available to participants on the use of developed AI capabilities by Ukraine following development? Specifically, can UK companies receive assurances that any models developed will be applied "safely, securely, and with clear human accountability" as described in the competition overview document	The deployment and operational use of developed AI model weights will be determined by the Ukrainian Ministry of Defence in accordance with Ukrainian law, military policy and operational requirements. The UK and Ukraine remain committed to the responsible development and use of AI-enabled capabilities within their respective legal and governance frameworks.
10. What labelling system is the data? Yolo, coco etc? and what metadata is included?	All labels are labelled in multi-object tracking (MOT) style, with various metadata about the footage derived from visual understanding. The class taxonomy will be shared with the selected UK companies upon access to the Avengers Labs platform.
11. Does the data/MLOps platform have vGPUs or do we train models in our own environments?	Each team gets GPU time at roughly the level of one NVIDIA A100 (80 GB). Teams can request additional resources, and each request will be reviewed case by case.
12. The competition mentions swarming capabilities - does the data have some time and geolocation data with it so that we can match clips that are capturing the same scene? How are you going to evaluate a swarming capability?	No, the platform does not provide geolocation metadata for the footage. Ukraine's Ministry of Defence has planned this for next year to support GNSS-denied use cases.
13. Could you share more on how objects are annotated in the real-world data? Specifically, are AI / computer vision models used in labelling dataset, and if so, have all labels/annotations been validated? Label errors in the dataset itself would impact the validity of model evaluations (accuracy and precision measurements) and real-world trustworthiness of the developed capability	All labels and annotations are reviewed and validated by a human before being included in the dataset.
14. Who has access to the self-hosted code repositories? What guarantees are there that our code won't get exported / copied this stage?	Access to code repositories is limited to the submitting company's own team and a small number of authorised Avengers Labs reviewers. Code is reviewed by platform staff solely to prevent leakage of the dataset through the training process. Companies agree to this review as a condition of access to the platform.



15. In the application it asks "How will you use Avengers Labs data and platform capabilities?" • Could you provide a more detailed breakdown of the nature of the data? • What's the annotation structure? • What's the spread across resolutions? altitudes? modalities? vehicle classes? levels of camouflage? • Can you elaborate on what the Avengers platform capabilities include? • Specifically what does the standardised ML toolset and ML methodologies entail? • If we have a checkpoint we want to fine-tune on top of, does that go through the same route?	In general, the dataset consists of EO/IR footage of ground and air targets, labelled in multi-object tracking (MOT) style, with various metadata about the footage derived from visual understanding. As of now, approximately 5 million frames have been annotated across EO and IR. The exact taxonomy and data distribution will be available on the platform. UK companies can work with the ML frameworks and checkpoints of their choice, including fine-tuning on top of their own checkpoints.
16. Are there any specific security restrictions to access, e.g. security clearance	UK companies should carefully consider whether they can comply with the security, information assurance and reporting requirements before applying. It is strictly forbidden to involve contractors or individuals who have some connection (citizenship, registration, founders, ultimate beneficiaries) with Russia, offshore zones or countries subject to applicable Ukrainian, UK, EU or international sanctions regimes. A complete list of all authorized employees must be submitted to the Ukrainian Ministry of Defence three (3) working days before the commencement of development activities on the platform. Ukrainian intelligence/law enforcement agencies have the unconditional right to revoke access for any company, person or contractor at any time for security reasons. Each company and user shall be subject to a range of contractual obligations, including confidentiality provisions with the UK Ministry of Defence.
17. Within the aerial-target dataset, approximately how much material comes from Ukrainian interceptor-drone operations, particularly engagements against Russian long-range attack UAS?	Yes, the dataset includes thousands of unique interceptions from Ukrainian interceptor-drone operations.
18. Does that material include complete engagement sequences, including approaches, unsuccessful interceptions, target reactions, missed approaches and reacquisition, or mainly selected frames and short clips?	This varies by use case. The material consists of footage clips rather than full engagement sequences, mainly from ISR and interception operations. The metadata does not indicate whether an engagement was successful.
19. Does Avengers Labs contain synchronised acoustic data from relevant aerial operations? If so, what types of acoustic events have been captured and labelled, and does this include aircraft or interceptor signatures and ground-based gunfire?	No. At present the platform holds EO/IR data only. Acoustic data is on the roadmap for future stages.
20. Can you outline the specific security requirements companies must satisfy before accessing Avengers Labs, including any personnel vetting, facility, cyber-security, nationality and remote-access requirements? Will the full requirements be provided before applications close?	UK companies should satisfy themselves at an early stage that they would be able to comply with these requirements if selected. Participation in Avengers Labs requires compliance with a robust security framework covering personnel assurance, cyber security, information protection, incident reporting, audit support and supply-chain security. Organisations should



	expect named-user access controls, enhanced cyber-security requirements, flow-down obligations to relevant subcontractors and ongoing compliance monitoring. While the framework is more demanding than a typical innovation competition, it is broadly consistent with what would be expected for access to sensitive defence-related AI development environments and operational datasets. For submission purposes, we are interested in reviewing responses to all of the questions published in our submission template.
21. The competition document states that Ukraine will own the trained model weights and that the relevant UK company will receive a sublicense through the MOD. What rights will that sublicense provide in practice? In particular, will it permit continuing development, retraining, deployment and commercial exploitation after Phase 1? Will it be perpetual, royalty-free and transferable, and permit use with customers, delivery partners and future investors?	In practical terms, UK organisations may continue to develop, adapt and integrate licensed Outputs (defined as AI model weights) into military items for UK and Ukrainian defence purposes within the UK and Ukraine territories. The licence does not provide unrestricted global commercial rights over the original Outputs and any wider use remains subject to the licence conditions and applicable export controls. The Outputs non-exclusive and revocable (sub)license is granted for the whole IP rights duration period and includes the rights to: - reproduction of the Outputs in computer memory, on hardware storage media, and in any other manner, including as incorporated in military items; - incorporation of the Outputs into software and/or hardware, including into military items; - adaptation, modification, upgrading, and other similar alterations of the Outputs; - manufacture of military items utilising the Outputs; - storage of the Outputs and of military items manufactured utilising the Outputs on any storage media; - offering for sale, selling, gratuitously transferring, renting, or lending copies of the Outputs and of military items manufactured utilising the Outputs within the Territory of the Outputs Licence exclusively for Defence Purposes; - repair, maintenance, technical support, and fulfilment of warranty obligations in respect of military items manufactured utilising the Outputs. The Outputs shall be used solely for the manufacture and/or supply of military items, including their gratuitous transfer, to meet the needs of the security and defence forces of Ukraine and the UK. Territory for both licenses is UK and/or Ukraine. The ability to commercialise or reuse capabilities outside the original scope will depend upon the extent to which those capabilities remain reliant on licensed Outputs and any applicable Ukrainian and UK export-control requirements.
22. How will you distinguish between Ukraine-owned trained model weights and the applicant's own software, model architecture, distributed decision logic, simulation, integration work and other programme-generated intellectual property?	The platform keeps these separate: uploading code or files and logging training artefacts follow two distinct technical paths and user flows. Model weights fine-tuned on platform data are treated as Outputs and are subject to the same IP licence terms as models trained from scratch on the platform. Existing software, source code, architectures, models, tools, training pipelines and other Background IP remain owned by the participating UK company.



23. Will participating companies be permitted to retain and reuse trained models for other customers, provided that no customer-specific or identifiable data is incorporated into or recoverable from those models?	Yes, subject to the conditions of the sublicense and any applicable export controls. The ability to reuse capabilities for other applications will depend on the extent to which those capabilities remain reliant upon licensed Outputs (specifically AI model weights) and any applicable export-control or licensing requirements. Please refer to the answer provided to clarification question 21 above.
24. Will API access for integration with existing toolsets be possible?	No. The platform provides a secure sandbox for running your own code, but integration with external APIs is not supported.
25. Will successful Phase 1 participants be able to demonstrate capabilities using classified or protected datasets in addition to Avengers Labs data?	UK companies selected to gain access to the Avengers Labs platform in Phase 1 shall be assessed on their development activities related to their access to the platform.
26. Will access be provided to real-world operational users to support experimentation and feedback during Phase 1?	Where available, operational observations and feedback may be provided to support capability development, but organisations should not assume direct access to operational users. Where feedback is available, it may be provided in a variety of forms and should not be assumed to originate directly from end users.
27. What compute resources will be made available within the platform, and are there restrictions on model size or training workload?	Each team gets GPU time at roughly the level of one NVIDIA A100 (80 GB). There are no restrictions on model size. Teams can request additional resources, and each request will be reviewed case by case. Resource availability may vary depending on platform utilisation and overall demand.
28. Beyond algorithmic performance, how important are deployability, integration, assurance, and operational transition considerations in the Phase 1 assessment?	Algorithmic performance is important, but it will not be the sole assessment criterion. We are also interested in understanding the deployability, scalability, integration potential, assurance considerations and operational relevance of proposed solutions. UK companies should therefore consider how their approach could transition from technical demonstration towards a capability that could realistically deliver operational benefit.
29. What is the anticipated funding profile for Phase 2?	Approximately £1.25 million (excluding VAT) is available for up to five (5) contracts.
30. Can TF RAID provide further detail regarding IP ownership of derived artefacts, including software, tools, architectures, training pipelines, synthetic datasets, and model improvements developed during Phase 1 and Phase 2?	AI model weights trained within the platform shall be owned by the Ukrainian Ministry of Defence and accessible via the UK MOD sublicense arrangements described above. Existing software, tools, architectures, training pipelines and other proprietary technologies provided by a participating organisation remain the property of that organisation. Companies should clearly identify any such materials within their submissions where relevant.