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Upgradeable sensors to rapidly detect chemical and biological hazards

Clarification questions and answers



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Document Details: Clarification Q&A in response to the call for proposals

Challenge: Upgradeable sensors to rapidly detect chemical and biological hazards

Deadline for questions: Tuesday 7th July 2026

#	Question	Answer
1.	Are any applications or requests seeking aptamers as a biosensor modality?	We cannot discuss applications, potential applicants, or specific approaches being considered during the live competition. Applicants may propose aptamer-based approaches, or collaborations involving aptamer expertise, where they can demonstrate a credible route to meeting the challenge requirements. We are unable to connect suppliers to other applicants during the live competition. Any collaboration after selection would be subject to the interest of the successful applicant and appropriate commercial arrangements.
2.	Are there existing open or fielded capabilities that perform out-of-library chemical signal interpretation and support response decisions, and would this be in scope?	We are unable to comment on existing capabilities, workflows, or other information outside of the published competition documentation. We welcome innovative proposals that address the challenge, considering the scope, example use case and other information provided. We cannot provide bespoke

		information about current capability, operational arrangements or potential problem areas.
3.	Would a modular approach be considered in scope?	Yes, a modular approach may be in scope, provided the proposal clearly demonstrates how it would meet the published challenge scope and essential requirements. Applicants should explain clearly how the proposed system would detect, identify, quantify and monitor relevant hazards, and how it could be developed beyond the initial TRL4 demonstrator.
4.	For the biological element, would safe representative materials be acceptable at TRL4?	Yes. At TRL4, we would not expect applicants to test against harmful biological agents. Safe representative materials or appropriate simulants would be acceptable.
5.	How should applicants approach ground-truth data for model training and validation?	Applicants should propose and justify their own approach to model training and validation, including appropriate use of safe representative materials where necessary. Applicants should explain why their chosen data and validation conditions are suitable for the competition and how their approach supports future development.
6.	Does the prototype need to be a single compact physical unit at this stage?	No. A modular or multi-component demonstrator may be acceptable at this stage, provided it meets the published scope and essential requirements. However, applicants should be aware that more integrated and deployable solutions may score more favourably against desirability criteria where relevant.

7.	Can independent verification take place at the applicant's own laboratory if the prototype is currently a fixed installation?	The published requirement remains that a working prototype must be delivered to the sponsors for independent verification. We cannot offer exceptions to this requirement, as this could be unfair to other potential applicants who may choose not to apply if they cannot meet the same requirement. However, the prototype does not need to represent a final portable or mobile product. Fixed or installed systems may still be relevant where they meet the essential requirements of the competition. If the applicant can explain how the prototype would be delivered, installed and calibrated for sponsor-led independent verification, this may be in scope. If the technology cannot be made available for sponsor-led independent verification within the project, that is likely to affect its suitability for the current challenge.
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