Industry Feedback Summary- RSPM Industry Engagement Day (5th September 2025, Tech UK)

This document summarises the feedback received from industry following the Range Safety Planning and Management (RSPM) Industry Engagement Day held on the 5th September 2025 at Tech UK.

During the event, the RSPM project team presented the problem space and invited industry to help shape the approach to procurement, including identifying key dependencies, assumptions and support to explore financial considerations. Attendees were encouraged to ask questions on the day and later contribute through a structured questionnaire and submission of white papers.

The following summary reflects the range of insights provided by industry. All responses have been anonymised and generalised to avoid individual parties being identified. The feedback is intended to inform ongoing development and future procurement planning.

<u>Commercial Caveat</u>

All feedback is provided on **"Subject to Contract"** and "**Without Commitment"** basis.

The Authority does not intend any responses to be legally binding until a written contract has been agreed and signed by those with authority to do so following a formal tendering process.

The MOD reserves the right and has no obligation to continue with the RSPM requirement, and if any potential supplier or suppliers elect to act on any information received within this document, it is entirely at their own risk.

Which capability areas do you believe your organisation can contribute to

Based on the RSPM technical vision presented, organisations identified several capability areas where they could contribute, such as digital range planning tools, live personnel and target tracking, after-action review systems, data integration and interoperability, and managed service provision. While some respondents highlighted specific technologies, anonymised for this report, the feedback indicates strong alignment between industry capabilities and the RSPM vision, suggesting a robust foundation for collaboration. Organisations expressed confidence in supporting all three capability areas of the RSPM requirement: planning, conduct, and review of live-fire tactical training. Their proposed contributions span software platforms for digital range planning, situational awareness tools for safety staff, and systems for after-action review and performance analytics, with some having already delivered similar capabilities in MOD exercises and operations, demonstrating both readiness and relevance.

What existing solutions or technologies do you think could meet all or part of the RSPM requirement

Respondents identified a range of existing technologies and solutions that could potentially meet the RSPM requirements, including MOD-owned systems already in use for dismounted situational awareness, commercial off-the-shelf planning tools, and proprietary platforms capable of telemetry and data integration. Many of these technologies are already deployed across MOD networks, which could facilitate integration and reduce development time. The modular and scalable nature of these solutions, proven in operational contexts, was emphasised, with some being immediately deployable and others requiring only minor adaptation to meet specific RSPM needs. Additionally, leveraging existing contracts and capabilities was highlighted as a key opportunity to accelerate delivery.

Are there any technical risks or limitations the MOD should be aware of

Respondents identified a range of technical risks that could impact the delivery and effectiveness of RSPM capabilities. These included challenges with operating in low bandwidth environments, latency in data transmission, and the accuracy, reliability, and refresh rates of telemetry and weapon tracking systems. Concerns were raised about user adoption, battery life, and the ability of systems to support safety-critical functions, particularly in live fire scenarios, alongside risks such as false positives in fratricide detection and alert fatigue among safety staff. Compatibility with existing MOD infrastructure, including integration with systems such as MODCloud, may require additional resources and assurance. The condition and supportability of legacy target infrastructure, especially where OEM support is lacking, were also noted as potential limitations. These insights underscore the importance of thorough technical engagement and proactive risk mitigation planning.

What commercial model(s) would best support the delivery of RSPM

Respondents expressed a preference for commercial models that support collaboration and long-term stability, including consortium or collaborative approaches, fixed-price contracts with milestone payments, and outcome-based agreements, particularly where existing capabilities could be leveraged. A long-term contract model, ideally spanning ten years, was widely recommended to enable continuity and system evolution through spiral development. There was openness to SME participation and consortia, with enterprise-level procurement suggested to ensure consistency across all ranges and avoid fragmented implementation. These models were seen as well-suited to managing the complexity of the RSPM project and fostering effective cooperation between industry and the MOD.

What delivery challenges do you foresee with the proposed timeline

Delivery challenges identified by respondents included the need for early and sustained stakeholder engagement, particularly with entities such as Defence Infostructure Organisation (DIO), and the impact of contracting models on product development and stability. Accreditation timelines, procurement of long lead-time items, and short contract cycles were seen as potential hurdles to timely delivery. Integration with existing infrastructure, managing the training burden for users, and ensuring robust change management were also highlighted as critical factors. Respondents emphasised the importance of intuitive software, scalable hardware solutions, and a clear roadmap with early MOD commitment to avoid delays. To mitigate risks and refine delivery, some organisations proposed phased rollouts and pilot implementations.

Are there opportunities to accelerate delivery without compromising quality or safety

Opportunities to accelerate delivery of RSPM capabilities include leveraging existing systems and contracts, reusing assured MOD-owned technologies. Respondents proposed immediate deployment of commercial off-the-shelf hardware, modular software updates, and using training sites as test beds prior to contract award. Many capabilities were noted as already available and suitable for rapid deployment, supported by intuitive interfaces and training support to enable swift adoption. However, respondents emphasised that safety, accreditation, and assurance processes must be carefully managed to maintain quality and effectiveness throughout accelerated delivery.

Do you believe this budget is sufficient

Opinions on the sufficiency of the indicative budget varied among respondents. While some believed it could support partial solutions, particularly those focused on planning and situational awareness, others indicated that full implementation, including review capabilities and target instrumentation, would exceed the current budget. Cost estimates ranged widely over a ten-year period, depending on the scope and hardware requirements. To manage costs, suggestions included phased delivery, shared usage of systems across sites, and leveraging existing infrastructure to reduce expenditure.

If the scope needed to be reduced, what changes could be made without compromising the essential RSPM capability

Scope reduction strategies proposed by respondents focused on maintaining core functionality while staying within budget constraints. These included minimizing the number of systems deployed, prioritizing essential capabilities such as planning and safety, and deferring non-critical components like review functionality. Sharing systems across multiple sites and emphasizing software development over hardware procurement were also suggested. Some respondents recommended treating weapon tracking and lethality analysis as separate or future programmes, and simplifying planning tools to focus solely on range danger area traces. These approaches aim to preserve critical safety functions while reducing complexity and cost.

Do you agree with the assumptions outlined in the engagement pack and presentation

Most respondents broadly agreed with the assumptions outlined in the engagement materials, indicating strong alignment with industry expectations. Where disagreements arose, they were generally not detailed, though some challenged the prioritisation of planning over conduct and review. Questions were raised regarding the balance of training responsibilities, integration of qualifications, and the practicality of certain technical requirements. Additionally, respondents emphasised the need for greater clarity around risk ownership and system reliability.

Are there additional requirements the MOD should consider

Respondents proposed several additional requirements to enhance the effectiveness of RSPM delivery. These included defining essential capabilities, specifying locations of use, and clarifying available infrastructure, alongside the need for intuitive user interfaces, robust training support, and integration with MOD data services. Detailed technical engagement was emphasised to ensure tailored solutions, with suggestions to align RSPM with other programmes to build an enterprise-level training and safety ecosystem. Integration with existing MOD systems, metrics on training progression and readiness, and scalable cloud-hosted solutions were highlighted as important considerations. Some respondents also proposed innovative features such as AI-enabled fratricide detection to strengthen safety and operational insight.

Please provide any further comments, suggestions, or innovative ideas for the RSPM project

Further comments from respondents included proposals for consortium-based delivery models, training-as-a-service offerings, and iterative development strategies, reflecting a strong willingness to collaborate and adapt solutions to meet MOD needs. Innovative ideas focused on enhancing interoperability, leveraging existing technologies, and ensuring serviceability through dedicated support teams. Suggestions also included AI-enabled cameras for fratricide detection, cloud-hosted solutions for scalability, and embedding change managers to support cultural adoption. Organisations emphasised the importance of avoiding fragmented implementation, ensuring resilience in networking solutions, and maintaining flexibility in hardware choices. There was strong support for an enterprise-level approach to training data integration and performance optimisation.

Questions from the Industry Engagement Day:

1. Interim Solution & Contractual Arrangements

- What is the interim solution, and how long is the contract in place for? (Range Planning)
- Frequent changes to planning and live firing procedures every 3–5 years after the interim contract ends can pose risks, why not introduce a longer-term contract

The interim solution is called Interim Range Safety Tool (IRST) it is provided by Symcentric; it is a 2+1+1 contract let June 2025.

For RSPM, the Authority has taken industry feedback into account and is now reviewing the proposal to draw up a 5-year contract with 5x 1-year options.

2. Historical Context & Lessons Learned

- This has been tried a few times in the past - why do you think those efforts have failed and what's going to be different this time to ensure success?

Previous efforts struggled due to limited scope and misalignment with operational needs. This time, we're inviting the market to propose innovative and scalable solutions that reflect the complexity of the problem. By giving industry space to shape the approach, we aim to deliver real operational value and learn from successful models.

3. Stakeholder Engagement & Ownership

- What stakeholders have been engaged to determine the SoR - CTTP, ADS etc
- What involvement, if any, is DIO, WES and/or the DTE prime contractor having in informing the requirement and solution
- Who drove/initiated this requirement and who in Army HQ/Fd Army owns/support this requirement at desk level
- This requirement does not appear to sync with CTTP - has the CTTP team been engaged?
- What are the linkages to CTTP, will this capability only serve training conducted outside that covered by the STP
- Will the STP under CTTP be expected to interact with whoever delivers this - how and at what level
- Have you looked/are you looking to leverage learnings from across the ABCANZ community?

The RSPM capability will deliver at a shorter timeline than CTTP. RSPM seeks to deliver primarily a safety-enabling capability whereas CTTP seeks to deliver primarily upon a training improvement mandate. Despite the difference in fundamental aims, the dependencies and overlaps have been acknowledged. RSPM will deliver at the lowest level, down to individual, and will be procuring capability against Problem Statements developed to highlight where improvements can be made upon the extant Safe System of Work. A secondary effect of this is the improvement in training for, in initial capability iteration, the dismounted close combatant. CTTP is focussed upon collective training at the Battlegroup level and above. There are clear overlaps in outputs and where requirements between the projects can be rationalised. However, the fundamental principles of RSPM and the User needs for Safety cannot be serviced through CTTP, only enhanced and improved upon, as and when CTTP delivers capability.

The Light Forces Functional Capability Working Group (FCWG) owns the original mandate for the RSPM capability to be procured.

The RSPM project team is in continual conversation with other NATO nations as to how they cohere activity and ensure safety during live-fire activity. There are pockets of excellence demonstrated by other nations in specific disciplines (Artillery and larger calibre indirect fire, Armoured platforms). However, there is no equivalent that demonstrates an end-to-end appreciation of enhancing safety of LFTT (or equivalent) to the level of the dismounted close combatant.

4. Technical Architecture & Hosting

- Do you envisage RSPM software being hosted by the MoD within ModNet (for example) or hosted by the contractor with a portal through ModNet?
- You mentioned Mod Cloud. With the sensitivity of the data and the aggregation of personal data, this would need MoD secure Cloud or private secure cloud
- Can this solution run at OS in MoDCloud ICE / ACE? Anticipate some data may need to come from Bowman at S, but this could use tactical gateways I think?
- What MoD Cloud support has been allocated to the project?
- What engagement has been done with ADS for hosting and interaction with the FAST apps
- Who will oversee the SLA's for data interaction?

RSPM delivery team acknowledge the dependency to host information accessible through MODNET. The actualities of how this information is hosted will depend upon the benefits and drawbacks of options. Acknowledgment is given to the benefits and restrictions of hosting of information inside/access through MODNET, namely, IP ownership of software and containing data, time to amend UI/source code/account holders' information, cost to reach MVP, classification of data. There is currently no assumption that a gateway would be needed with Bowman CNR or its successors, given RSPM capability will be afforded (during the conduct phase) to dismounted close combatant elements who aren't fielded for such equipment. The project team has already engaged with ADS to determine how best to use services organic to MOD to provide the hosting architecture, although conversations are still nascent. RSPM project team is likely to follow the recommendations published with the pillars of the National Institute of Standards and Technology (NIST) Framework, alongside existing Secure by Design and software procurement policies.

5. Capability Scope & Integration

- Dismounted Close Combat was mentioned. Do you envisage the RSPM capability being used for MCC/veh ranges also?
- What are the linkages to future UK target upgrades? The SARTS fleet is currently maintained by Landmarc rather than an OEM support contact and is creaking.
- Is PLI (Position Location Info) from tactical comms systems (e.g Bowman) available to the safety staff today?

- Are you looking for personnel/vehicular alerts on static & dynamic “Go/No Go” areas during the exercise?
- There are current MOD owned Situational Awareness and data solutions that could be used as a foundation for this solution. Recommend looking at ASGARD ph 1.
- What is the connection / overlap with the ACTS tender that is about to be awarded?

The RSPM capability is focussed upon the dismounted close combatant during the conduct phase of LFTT. This is predicated upon initial user need to remedy incidents upon the range where unsafe practice has resulted in accident. Based upon Defence Accident Investigation Branch (DAIB), Health and Safety Executive (HSE) and Army Inspectorate reports, the most suitable place to apply remedy at this stage is the conduct of dismounted close combatant LFTT. RSPM is the latest effort in ensuring the risk carried in live-fire training, in all its guises, remains as low as reasonably practicable (ALARP). Although the focus of RSPM, and its initial capability requirements, will be upon the dismounted close combatant, the technology will be a proving ground for growth into other areas including mounted close combatants and larger calibre indirect fire capabilities. Currently, RSPM is adjunct to the provision of targets on live-fire areas and will rely upon a separate procurement route to furnish exercising troops with the physical target, to then be instrumented/interact with RSPM capability. Currently, those safety staff responsible for dismounted close combatant LFTT do not routinely have access to Position Location Info (PLI) from Bowman Combat Net Radio (CNR) or its upcoming replacements. However, if there are MOD-owned capabilities (ASGARD Ph1 included) that can be turned to benefit RSPM then the Project team will acknowledge how this could be a cost-saving measure.

Concerning ‘Go/No Go’ alerts: The variation in the arrangement by which LFTT training objectives can be met is the reason why ensuring Safe Practice during such activity is fundamentally based upon human judgement. There may be certain arrangements, scenarios or conditions that should they be met, constitute unsafe behaviour, but these are in the minority. It is the view of the User that current technology solutions and industry offerings can only go to augment the safeguarding of the Safe System of Work (SSoW) through people-centered approach, rather than subjugating decisions first to software. Put another way, agnostic of how (and in what form) technology would provide signal to the user, Safe Practice is seen as remaining human-in-the-loop (as opposed to even human-on-the-loop). In short, the ultimate decision of Safe Practice will remain in the hands of those users (exercising troops and safety staff) involved in LFTT practice.

6. Training & Doctrine Alignment

- So does the current range planning taught on juniors, seniors, PCD etc not achieve its aim

On the whole, current range planning training delivered on courses like juniors, seniors, and PCD does achieve its aim. However, the 17 deaths over recent years highlight that stress points often arise from compounding issues—particularly around planning for conduct and situational awareness of safety staff during live exercises. These are areas where improved tools and processes could make a significant difference.

7. Feedback & After Action Review (AAR)

- Immediate feedback is possible but it is thought that it would be disabled during the activity. Please confirm if this is required? (AAR)

We're mindful not to introduce additional information flows that could overburden or reduce the effectiveness of LFTT unless they offer a clear safety benefit. Our current expectation is that feedback will be captured and delivered post-activity, in line with standard After Action Review practice, rather than during live execution.

8. Locations & Deployment

- Are the 21 UK locations specific range locations i.e. D Range SENTA

RSPM at Initial Operating Capability will be capable of serving concurrently those LFTT Areas within one range complex (ie. Sennybridge Training Area, Castlemartin, Salisbury Plain Training Area). RSPM at full operating capability will be capable of serving concurrently those 19 (nineteen) UK DTE range complexes as specified in JSP 907 along with a deployable capability to furnish those overseas LFTT areas. Each range complex has a capacity to host LFTT to a differing level of collective training, as specified in JSP907 and associated Range Standing Orders and Training Facility Information. Full details of each MOD Form 905 (Range facilities and capabilities) will be published with Project Problem Statement and SOR. Those overseas ranges that are available for LFTT will be included within the scope of RSPM as the in-service capability develops. It is acknowledged that within current budgetary limits it is unlikely that capability can be achieved overseas.

9. Funding & Commercial Strategy

- What funding has been allocated to assist the R&D for this requirement?
- £15m over 10 years is too low. SFIA rates for software dev personnel will require a greater budget
- Has the commercial team considered handling utility billed elements like Cloud consumption and potential SaaS solutions for scaling up/down to demand?
- The qtys suggested were for a Pls worth of equipment. The LTS ME is CYCLONE and therefore will be required to equip multiple sub-units concurrently = increased cost
- Pace = Risk = cost£££££

We're not yet fixed on a commercial pathway and are actively reviewing industry feedback to help shape it. We anticipate some dependencies on MOD-owned systems, which will influence both design and delivery.

From industry feedback, we anticipate that the best way forward is to use the initial £15M allocation to fund a Minimum Viable Capability (MVC) through a competitive, design-to-cost approach. Our aspiration is to secure future funding to spiral RSPM into the fully desired capability. No specific amount of funding has been set aside for Research and Development. However, we are also exploring the feasibility of increasing the budget in line with industry feedback.

We're exploring commercial models that support innovation, the aim is to create a less constrained environment where industry can propose innovative, cost-effective solutions.

The Authority recognises that the scale of delivery will drive cost and complexity. Pace introduces risk, but we're committed to managing that through smart procurement and close engagement with stakeholders.

10. Prioritisation & Delivery Strategy

- If the resources available do not match the ambition, what is the priority between the 3 requirements (planning, monitoring, quantifying)?

Problem Statements have been produced to support communication with industry and generate productive engagement during further refinement and understanding of problem context, need and potential outcomes. As part of this work, the prioritisation of requirements will be achieved through determining the likely benefit of proposed solutions to the safe running of LFTT. This will be realised during the Test and Evaluation (T&E) activity where contractors are able to demonstrate or propose potential solutions to enhance the scenarios described in the Problem Statements. There is a balance to be struck between technological readiness of solutions, versus where effort can be best applied in all stages of LFTT.

11. Connectivity on ranges

- When all analogue phones are switched off soon (PSTN switch off) – will a range without any other means of resilient comms still be considered a 'Safe Place'?

With the upcoming PSTN switch-off, ranges that previously relied on analogue phones will lose a legacy communication method. However, most ranges already operate using

alternative communications such as radio. The core issue for RSPM is not the removal of analogue lines, but the broader challenge of working in environments with poor or no data connectivity. Ranges often lack reliable infrastructure, and this must be a foundational assumption in any future instrumentation approach. Users need to be able to visit a range and begin planning traces ‘in the live’ (from within the movement box) without depending on connectivity. Additionally, tracking the movement of players in the field will require contractors to account for the limitations of these environments when designing their approaches.