Reference: LWC/ORB/Exp/ABCT\_v0.3

Date: 14 Dec 22

**ASTRID Task XXX - Statement of Requirement**

**Support to Land Warfare Centre Operational Research Branch**

**Armoured Brigade Combat Team – Optimisation and Experimentation Campaign**

**Context**

1. REDACTED and the significant capability programmes, that are to be delivered to REDACTED during this decade, present immediate challenges. Wholesale change will be driven into the REDACTED, necessitating optimisation and adaptation now, to maximise the effect and impact of the capability change programmes.
2. REDACTED must begin its transformational change, preparing for the delivery and integration of REDACTED capabilities, as an Armoured Brigade Combat Team (ABCT), to better fulfil a warfighting role. Work is needed right now to understand, develop and test the ABCT concept, and to inform the development of Doctrine and Concept of Employment (CONEMP) required for the successful integration of these platforms and the realisation of the range of potential benefits they may offer.

**Background**

1. ASTRID Task 213, Heavy Forces scoping study, will provide a foundation for this LWC ORB experimentation and optimisation campaign. It will conduct a cross-DLoD gap analysis to identify and prioritise questions and issues focussed on the brigade combat teaming concept of REDACTED in the REDACTED force structure. The products from this work will be a gap analysis report, an Integrated Analysis and Experimentation Campaign Plan (IAECP), Concept of Analysis (COA) and framework management plan that directs warfare development (WARDEV) experimentation and optimisation activities between FY23/24 to FY25/26 REDACTED.
2. The scoping study products will remain live documents which will require regular review, development and adaptation to reflect a spiral development approach to addressing the identified questions, issues and assumptions.

**Requirement**

1. This Statement of Requirement, the ABCT optimisation and experimentation campaign, will execute and deliver the plan over the next three years (FY23/24 to FY 25/26). It is expected that the scoping study output will recommend a progressive approach, maximising the use of blended analysis methods and tools, including further studies combined with virtual, constructive and live experimentation, to produce appropriate evidence, cross-DLoD insights and recommendations.
2. This requirement aligns with the REDACTED intent for REDACTED, specifically “Making Blue Better and Red Less Impactful” through cross-DLOD optimisation of available/arriving ABCT capability whilst seeking opportunity to reduce the impact of enemy capability against these formations.
3. The campaign approach will help REDACTED and LWC Warfare Branch understand and address the integration and the optimisation of the combined use of REDACTED set within a representative threat context. The project outputs will contribute to updated LWC Doctrine, development of REDACTED and ABCT CONEMPs and changes to tactics, techniques and procedures (TTP).
4. The work of the project team will contribute to the wider REDACTED optimisation themes and Master Questions (Annex A - Wider REDACTED context) as the REDACTED develops and adapts to meet the challenges of REDACTED and the introduction of new capabilities. Therefore, the project may inform and/or be informed by these wider REDACTED activities, including work at Brigade, Battlegroup and Sub-Unit level.
5. Whilst primarily focussed within WARDEV timescales, the campaign may also generate information and knowledge that informs cross-DLoD Capability Development (CAPDEV) (2026-2030) gaps and requirements.
6. The project team will
   1. draw upon supporting resources, knowledge, experience and wider activities across the Land Warfare Centre, Field Army and Army HQ. In particular, partnerships with the Experimentation and Trials Group (ETG) and REDACTED are anticipated to conduct live experimentation activities,
   2. leverage related research/analysis/experimentation across the Defence enterprise to improve coherency, efficiency and effectiveness across all activities,
   3. establish partnerships with other groups and improvement initiatives across LWC and Field Army (e.g. WARDEV network, Urban Centre, Experimentation and Trials Group, Collective Training Group/REDACTED),
   4. develop and maintain an agreed common campaign threat picture, in line with COS FA endorsement for LWC/Field Army to move to a threat-based approach across all land domain business,
   5. be aware of, and respond appropriately to, emerging concepts and changes to doctrine, reflecting emergent lessons from REDACTED and REDACTED development, and the impact on the REDACTED Army; exploit lessons identified through REDACTED to address vulnerabilities.

**Approach**

1. Whilst the scoping study products are not yet available, the following outline approach is anticipated
   1. Project management and planning
      1. It is expected that the project will be planned and delivered in Stages and in line with products produced by the scoping study. Each Stage will be defined by the Project team and agreed by LWC ORB. The project team will produce
         * outline Project Plan (including Project design, team organisation, roles and responsibilities, expected Project products[[1]](#footnote-2), anticipated schedule)
         * stakeholder engagement and communications plan
         * assumptions list
         * risk and issues register
         * Stage Plans, to include (as a minimum)
           + work packages or tasks to be completed during the Stage
           + anticipated resource allocations and associated costs,
           + expected duration,
           + expected outputs and delivery dates,
           + budget, forecasts and payment schedule for the Stage
   2. Year 1 - expected to be TTX, wargaming & paper study heavy, with 1 or 2 exercises/simulations.
      1. An initial focus on refining and developing the Master Questions and scoping study outputs as needed and confirming the prioritisation of identified risks and opportunities.
      2. Detailed preparation and planning of Year 1 wargaming/TTX, simulation, paper study and experimentation activities.
      3. Outline planning and preparation for Year 2 and 3 simulation, research experimentation activities.
      4. Stakeholder engagement to maximise the opportunities available in Year 1
      5. Execute IACEP Year 1 activities, ensuring all data collected is suitably validated, verified and analysed.
      6. Create a report evidencing answers to the MQs and providing clear and actionable Tranche 1 WARDEV recommendations, with an Annex covering initial CAPDEV recommendations.
      7. Detailed planning and preparation for Year 2 simulation, research experimentation activities.
   3. Year 2 - expected to be exercise & simulation heavy (~4 events) augmented by wargaming/TTXs as required.
      1. Refine Year 2 plans based upon Stakeholder feedback from Tranche 1 recommendations – to include experimental concepts, variations and treatments.
      2. Stakeholder engagement to maximise the opportunities available in Year 2.
      3. Execute refined IACEP Year 2 activities, ensuring all data collected is suitably validated, verified and analysed.
      4. Create a report evidencing answers to the MQs and providing clear and actionable Tranche 2 WARDEV recommendations, with an Annex covering updated CAPDEV recommendations.
      5. Detailed planning and preparation for Year 3 simulation, research experimentation activities.
   4. Year 3 - expected to be exercise & simulation heavy (~4 events) augmented by wargaming/TTXs as required.
      1. Refine Year 3 plans based upon Stakeholder feedback from Tranche 2 recommendations – to include experimental concepts, variations and treatments.
      2. Stakeholder engagement to maximise the opportunities available in Year 3.
      3. Execute refined IACEP Year 3 activities, ensuring all data collected is suitably validated, verified and analysed.
      4. Detailed planning and preparation for Year 3 simulation, research experimentation activities.
      5. Create a report evidencing answers to the MQs and providing clear and actionable Tranche 3 WARDEV recommendations, with a separate report covering overall CAPDEV recommendations.
      6. Support the transition to implementation and integration within Field Army and REDACTED
      7. Detailed planning and preparation for Year 4 exploitation, implementation and refinement activities.
   5. Year 4 (optional)
      1. Whilst beyond the scope of this three-year SOR, there is an expectation that further work will be necessary to support the exploitation, implementation and refinement of the ABCT concepts and recommendations generated through this project.

**Deliverables and Outputs**

1. The Project team, with LWC ORB, will define and agree (in advance) the nature, timing and anticipated cost of all Project Products expected at each Project Stage. The Products may be influenced and/or defined by the needs of wider stakeholders, e.g. inputs to CONEMP/doctrine, lessons, training and education events or other S&T activities.
2. Deliverables will be defined in detail during stage planning and will be directly linked to an assessment of progress and formal payment. They may consist of plans, desk level reports, presentations, briefings.
3. An initial list of anticipated Deliverables is as follows
   1. a continuously maintained Project Plan (including Project design, Products, expected schedule, engagement and communications plan); initial Risk and Issues Register; stakeholder and communications plan, initial Stage Plan – no later than contract award + 2 months,
   2. Stage Plans (with payment milestones),
   3. monthly Project review meeting record highlighting review of
   * Stage plans
   * completed vs. outstanding tasks
   * outputs and outcomes (including successes and failures)
   * realised and/or potential benefits/disbenefits
   * emerging requirements,
   * risks and issues
   1. stakeholder progress reports and/or briefings (every six months),
   2. end of Stage reports to include record of effort expended,
   3. Concept of Analysis (approach and methodology), Experimentation Design Documents and Data Collection plans.
4. Project Outputs will not be tied to payment schedule but will be generated to capture knowledge and provide a record of information and evidence. Examples are
   1. technical reports,
   2. the transfer of knowledge and outputs (data, observations, insights, evidence and material) into practical outcomes to inform or support including (but not limited to)
   * Military Judgement Panels (MJP) and workshops
   * inputs to LWC Lessons/DLIMs
   * information products to support Doctrine development
   * improved representation of the THREAT through REDACTED
   1. “good practice guides” for exploitation of experimentation outputs, consolidating the project approach, lessons learned and guidance to support future exploitation projects.

**Exploitation and Outcomes**

1. The project knowledge, evidence and recommendations will contribute to the development of products needed for the implementation of the ABCT concept, e.g. Doctrine, CONEMP and TTPs.
2. The successful outcome will be the integration of REDACTED of the brigade combat teaming concept of integration into the REDACTED force structure.

**Schedule**

1. The work should commence in April 2023 and be completed by March 2026.

**Assurance and Acceptance**

1. LWC ORB, supported by stakeholders and/or contracted support as required, will review all Project deliverables prior to acceptance. The level of scrutiny and timescales for review will be appropriate to the nature of the Project Products and will be agreed between the Project team and LWC ORB.

**Payment**

1. The contractor team will be paid according to an agreed Project and Stage Plans and on satisfactory completion of Project Deliverables, within a Limit of Liability (LoL), which will be endorsed and accepted by LWC ORB. Given the agility required to deliver this project in support of likely dynamic priorities over the project period, it is expected that a LoL contract will best service the developmental nature of this task.

**Project Governance**

1. The project will be delivered as a contracted collaboration between suppliers and LWC ORB. It will be coordinated and supported through monthly Project review meetings with LWC ORB and stakeholders. This will
   1. review progress against Stage plans, give direction and take corrective actions as required,
   2. assess, manage and maintain project risks and issues register,
   3. facilitate meetings and back-briefs with key stakeholders where appropriate.
2. Wider stakeholder briefing, updates, briefings and/or Military Judgement Panels will be required at least every six months.

**GFX**

1. LWC will endeavour to provide, facilitate or enable access to
   1. relevant key stakeholders and information,
   2. coordination with other commercial entities supporting Field Army initiatives,
   3. general support from LWC ORB,
   4. ModNet access with appropriate permissions,
   5. access to military subject matter expert staff within Field Army,
   6. access to training events in the UK and (potentially) overseas,
   7. access to SSET Troops if required (early identification will be required).

**Security**

1. All Contractors employed on the task will require SC clearance. Deliverables may be sensitive in nature and will be delivered at the appropriate classification up to and including REDACTED.

**General Data Protection Regulations**

1. All data collected that could be considered “Personal data” under the new General Data Protection Regulation (GDPR) must be handled in accordance with the regulation. It should be noted that the GDPR widens the definition of personal data to include:

*“Any information relating to an identified or identifiable natural person (‘data subject’); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person”.*

1. Any personal data must comply with entire GDPR however the following key parts of the regulation are expected to be demonstrated as minimum. The 6 principles of this regulation must be followed, these are
   1. Processing must be fair and lawful
   2. Purposes of processing must be specified, explicit and legitimate
   3. Personal data must be adequate, relevant and not excessive
   4. Personal data must be kept up to date
   5. Personal data must be kept for no longer than necessary
   6. Personal data must be processed in a secure manner
2. A Privacy Impact Assessments (PIA) must be conducted as part of any personal data collection to ensure compliance with the GDPR. In addition, data subjects must opt into having any personal data collected and their consent must be provable. The individual rights of data subjects should also be understood and respected through the collection, processing and storage of their personal data. All parties involved in the handling of personal data should also understand their obligation to report data breaches as soon as they are discovered. Parties involved in processing personal data should understand their obligation for doing so lawfully. Data must be processed under one of the following bases to be lawful
   1. Consent
   2. Contract
   3. Legal obligation
   4. Vital interest
   5. Public Task
   6. Legitimate interest

**Contractors On Deployed Operations (CONDO)**

1. There is an expectation that Contractors, and their respective employees, may deploy to a CONDO Applicable Area, designated for CONDO purposes by the Permanent Joint Headquarters, and therefore **DEFCON 697 shall apply**.
2. CONDO activities will be identified during stage planning. A clear statement of work for each CONDO activity, including the expected work locations and expected travel arrangements for that work, will be produced.
3. Acceptance of CONDO conditions in the contract must be conditional on each task being subject to separate acceptance, **before deployment takes place**, at which time the deployed environment must be assessed for risk to the individual(s) deployed. **The contractor reserves the right to decline a CONDO task on a contract if the risk assessment is adverse.**
4. The procedures set out in Def Stan 05-129 are to be followed.
5. Contractor and subcontractor deploying staff, for each deployment, must not deploy until;
   * They have been identified by the Contractor and assessed to be appropriately skilled, medically and dentally fit, briefed, inoculated/immunised (where appropriate), security cleared, hold appropriate visas, have been trained for the particular deployment to standards set by MoD, have the appropriate clothing available, have updated records of personal details including next of kin.
   * A Contractor ‘In-Theatre Manager’ has been designated from the CONDO Personnel for managing the In-Theatre contract implementation; and points of contact identified for managing the deployed staff and the contract from Contractor’s base.
   * the Contractor’s plans and procedures (e.g. work plans, Health & Safety procedures and GFE Forward Holding Records, exit plan) applicable to the particular tasks and deployment have been prepared, so far as is possible; where relevant and not already covered under the general responsibility of the contractor, equipment and other resources have been identified and made available for deployment with all necessary export licences, Crown Immunity letters for GFE and export end user paperwork to hand;
   * **CONDO Form 1 (Annex B, Appendix 1, to Def Stan 05-129)**, the conditional authority to deploy, has been prepared for the designated deployment and signed off in accordance with JSP 567 as described in Def Stan 05-129.
   * **CONDO Form 2 (Annex B, Appendix 2, to Def Stan 05-129) or DCS Form 2 (2015DIN03-018 - Joint Service Publication (JSP 567): Amendment to Part II: Contractors On Deployed Operations (CONDO): Introduction of Revised Policy, Sept 2015)**, being the Authority to deploy for the list of the complement of staff to be deployed, has been prepared by the Contractor and signed by the Contract Sponsor for the designated deployment in accordance with JSP 567 as described in Def Stan 05-129;
   * CONDO Personnel have been briefed on the need to comply with the terms of DEFCON 697 whether on or off duty, specifically Clauses 6, 18, 31, 33, 34, 35, 36, 37, 38, 39, 42, 47 and 48 of the Condition;
   * CONDO Personnel have been briefed on relevant personnel matters and on their legal status;
   * an appropriate ID card or security pass has been issued (where required) by MoD to each individual listed in CONDO Form 2;
   * CONDO Personnel have been designated under the Armed Forces Act 2006 as civilians subject to service discipline and a signed Form T-SL-DES01 has been received indicating that status; and
   * a risk assessment has been undertaken for each expected work location and the expected modes of transport, with a satisfactory outcome.
6. Any subcontract requirement for the presence of a subcontractor (at any level of contracting) and his employees in a CONDO Applicable Area designated for CONDO purposes **must have the text of the Appendix to DEFCON 697 included in the terms of each of those subcontracts, with the relevant sections at Clauses 1.f), 1.g), 1.l) and 1.r) completed.**  These subcontractors and their employees are to be given the same briefings and training as contractor employees concerning contract compliance, working practices and the operating environment.

REDACTED

Principal Scientist

Land Warfare Centre Operational Research Branch

**Annex A**

**REDACTED Annex A Optimisation Themes and Master Questions**

1. Project Products - what the team expects to deliver as management, technical and supporting information products, records or reports to enable successful delivery of the Project. [↑](#footnote-ref-2)