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**XXXXXX Programme
ID XXXX – Gate 0/3**

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Contents

About this report

This report is an evidence-based snapshot of the programme's/project's status at the time of the review. It reflects the views of the independent review team, based on information evaluated over the review period, and is delivered to the SRO immediately at the conclusion of the review.

This assurance review was arranged and managed by:

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More information about the Infrastructure and Projects Authority and guidance for central government bodies on the requirements for integrated assurance and approvals is available from:

https://www.gov.uk/government/organisations/infrastructure-and-projects-authority

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1. Stage Gate Assessment (SGA)

See Annex A for SGA criteria and Gate Review Guidance and Workbooks found **here**.

The XXXXXX Programme is rated **Amber**

The Review concluded an AMBER delivery confidence. This is because although significant issues exist, there is still time to resolve them.

Whilst there are issues within the boundary of the Programme that can be resolved by the SRO, the Programme is subject to multiple enabling dependencies in its operating environment which are creating issues for the Programme.

If the following issues in the external environment are not resolved as a matter of urgency this programme will move towards a higher risk of failure.

1. High demand for SQEP **resources** impacting in TLB NAME, the Programme and its delivery partners.

2. A lack of mature TLB NAME **enterprise-level artefacts** (e.g. architecture) and governance (e.g. design authority).

3. Challenging **approval processes** and timelines not aligned with Spiral Development.

4. **TLB PORTFOLIO support** still evolving for example, dependency management.

The immediate focus for the SRO should be to continue with the workforce planning exercise to be absolutely clear on resource requirements, and to give Programme integration activities a high priority because system integration remains a high risk to successful delivery of the Programme's strategic objectives.

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2. Summary of concerns, evidence and recommendations

This section records recommendations, listed in priority order of impact, made by the Review Team.

Refer to Annex F for a breakdown of the recommendation classifications and the definitions for Critical, Essential and Recommended.

Priority	Recommendation	Risk and Issue Identified with Evidence	Classification	Critical, Essential, Recommended
1	**Resourcing -** The SRO to continue with the workforce planning exercise to be absolutely clear on resource requirements to deliver the full scope of the Programme, and to define how scope would have to be tailored to match resources allocated. **(See Paragraph: 5.22, 5.27, 5.32, 5.41)** *Where particular skills merit dedicated resource to establish and embed capability, a short-term injection of external support should be secured, for example to improve Dependency Management*	Demand on scare resource and SQEP are seriously threatening programme delivery, significant disruption in the longer term cannot be discounted. The presence of substantial resourcing pressures in terms of capacity are causing the overheating of staff to the extent that in the absence of any organisational resilience programme delivery is seriously threatened. Delivery Agents continue to be under resourced and in the case of DELIVERY ORGANISATION the Programme steps in to fill the gap. There is a risk that this causes divergence from wider enterprise needs or prevents the XXXXXX Programme delivering capabilities critical to the effectiveness of the FRONT LINE COMMAND's wider eco-system of physical equipment, personnel and digital transformation, which in turn could impact on the connections being developed with the INTERNATIONAL PARTNER and NATO.	10 Resource & Skills Management	Critical

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2	**Programme Integration Office (PIO) -** The SRO should establish the PIO as a governing body that brings all system and business integration activities together. **(See Paragraph: 5.49)**	The PIO is critical to the success of the Programme and will manage the application of architectural Principles across all projects and sub-programmes to ensure that integration is achieved in a viable and sustainable manner that delivers incremental value to defence. It is therefore imperative the PIO is established quickly as the forum to govern integration activity.	1 Governance	Critical
3	**Governing Bodies** – The Programme Director should provide clarity of all the boards and working groups that contribute to running of the Programme to help the SRO to identify any gaps/duplication. **(See Paragraph: 5.61)** *The outputs from the PIO and a Technical Design Authority are key components in decision-making.*	The XXXXXX Programme Governance is a complicated landscape. Alongside the Programme Management Office (PMO) and the new Programme Integration Office (PIO), the Programme is setting up a Joint Planning Office (JPO) for SUB-PROJECT (recommended in the last review report). There is a risk of duplication of effort and a lack of visibility as to where decisions are made, and advice is given	1 Governance	Essential Within 3 months
4	**Artefacts –** The Programme Director should focus efforts into a smaller range of artefacts, that can be matured and add value in the overall reporting. The suggested smaller suite of products to include a blueprint with working assumptions, critical path, risks/issues, change control decisions and application, dependencies, approvals/wider decisions. **(See Paragraph: 5.65)**	The risk of engaging with too many artefacts is that none is delivered well and the Programme will be inefficient and not properly controlled. This is also a risk to the well-being of personnel who are trying to service a full list.	11 Knowledge Management	Essential Within 3 months

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| 5 | **Communication and Engagement** - The SRO to continue to establish external support to build and embed communications and engagement plans.

(See Paragraph: 5.57) | Understanding of what the XXXXXX programme is, is not universal and there is work to be done to communicate the detailed plans, benefits, and purpose of this project to all stakeholders. This is necessary to maintain momentum and be clear on the importance of the interdependencies between the CAPABILITY delivered by SUB-PROJECT and the physical assets being delivered by other projects within the Programme.

The Programme would benefit from ensuring a clear and consistent narrative being set out at the beginning of all investment cases that describes the interconnection in the overall CAPABILITY landscape. Without this there is a risk that the strategic importance of connecting kinetic equipment to the data flows and analysis from SUB-PROJECT is not understood fully and is not given sufficient delivery priority.

Without comprehensive strategic communications by the programme, opportunities may be missed and stakeholder buy-in to the programme benefits impacted. | 2

Stakeholder Management | Essential within 3 months |
| 6 | **Futures Road Map -** The SRO is to ensure that the Programme is involved in the further development of the Futures roadmap to ensure the suite of Futures artefacts can be used to drive the Programme forward and support communication pathways.

(See Paragraph: 5.46) | Without involvement in the development of Futures work there is a risk that the integration risk is compounded. | 8

Context, Aim & Scope | Recommended |

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| 7 | **Programme Mandate** - The Programme Mandate should be updated alongside a review of the Sub-Strategy to underpin appropriate capability delivery, and to ensure alignment between XXXXXX's end state and delivery of critical milestones.

(See Paragraph: 5.16) | The 2019 Programme Mandate is outdated. It provides a definition of scope that has been adjusted over time, or has not been fully resourced, and therefore needs to be resubmitted to capture these changes.

If the documents are not updated and aligned with a detailed roadmap to show the critical path from now through to 2035, the documents will become irrelevant and not representative of strategic developments (including latest technologies), and ultimately will not match expectations of the FRONT-LINE COMMAND. | 8

Context, Aim & Scope | Recommended |

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3. <u>Blockers to delivery</u>

This section records the critical, high impact blockers that are outside the project/programme's control that are or will severely impact Time, Cost, and Quality and Scope

No:	Blocker	Describe specific nature of blocker	Consequence if not resolved
1	Access to Suitably Qualified and Experienced Person(s) (SQEP)	Civil Service Recruitment Freeze Length of onboarding processes Competition with other programmes Reward and recognition packages Dependency on individuals Short term appointments Lack of recognition of SQEP for key roles	Unable to stand up specialist teams resulting in siloed working and risk of technical debt and divergence from wider enterprise needs Inefficient working; overheated personnel and poor resilience in the workforce.
2	A lack of mature TLB NAME enterprise-level artefacts (e.g. architecture) and authority.	Lack of enterprise-wide technical and business architectures. No single Design Authority. Overarching control process not evident. No overarching integration plan.	Cannot see how programmes are interdependent and therefore there is a risk of things being missed and the system fails. Change to programmes and projects is not managed effectively. Interdependencies between projects and with the environment external to the Programme are not identified or managed.

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			Impact of change in the operating environment not understood and benefits not realised.
3	Challenging appropriate approval processes and timelines not aligned with Spiral Development	Convoluted approvals process. Projects approved in isolation, without consideration of dependencies. Approvals process is not aligned to project methodologies.	Time delays to projects and programme. Additional cost. Technical debt. Decisions taken have a perverse impact on project and programme timelines.
4	TLB PORTFOLIO support still evolving post TLB NAME Operating Model FOC[1]	Prioritisation of programmes is done on a critical milestone proximity basis. For a 2035 programme this adds further challenge and delay. There was a suggestion that the XXXXXX Programme has less resource challenges than other programmes in the TLB PORTFOLIO, but this is not consistent with what was heard from those working in the programme. Focus on delivery of outputs rather than outcomes; and due to pressures, such as finance, the use of proximity prioritisation in the wider TLB NAME programmes. The programme's potential to succeed is hindered by the wider context of the TLB PORTFOLIO and following changes to the TLB NAME Operating Model	The XXXXXX Programme will be at risk of not delivering the outcomes that underpin the Mandate and negatively impacting the well-being of those working in the programme.

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		impacting its ability to resource and manage interdependencies between programmes. There are significant interdependencies with other programmes in the TLB PORTFOLIO, for example OTHER PROGRAMME, OTHER PROGRAMME and OTHER PROGRAMME.	

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4. <u>Comments from the SRO</u>

SRO Comments
I would like to thank the IPA review team for the detailed and candid analysis that they provided of the XXXXXX Programme; it was clear that they developed an in-depth understanding of its characteristics. They should be commended for the effort that was applied and for the pragmatism that they brought to the review. The recognition of the complexity within the Programme was a common theme of our discussions during the review week. I was also particularly impressed, but not surprised, by the passion to deliver successful outcomes that the review team identified. This was evident across the entire spectrum of contributors to XXXXXX. I fully accept all recommendations. Whilst there are already work packages underway in an attempt to address strategic communications and organisational design, the repeated concern about the resilience of the team and individuals is noted. Whilst many processes and programmatics need to mature (internally and externally) developing a more resilient programme structure will be a priority. An action plan to reduce risk to the programme will be put in place accordingly.

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5. Review Team findings and recommendations

5.1   The XXXXXX Programme is one of 11 GMPP programmes in an TLB PORTFOLIO of 32 programmes. XXXXXX is delivering a system of EQUIPMENTS that can PROVIDE CAPABILITY.

5.2   Whilst XXXXXX was reported to the Review Team as one of the most well run and transparent programmes in the TLB PORTFOLIO, it is also considered as one of the most complex. Whereas most programmes have a 1-1 relationship with delivery partners, XXXXXX has 2 delivery agents, multiple delivery teams, a significant number of dependencies and external relationships with the INTERNATIONAL PARTNER and NATO allies.

5.3   The Programme also operates under difficult conditions with the key enablers in its wider landscape immature, or missing, which is leading to suboptimal programme management and delivery practices. Everyone interviewed was aware of this issue and recognised that if Defence does not invest in improving programme enablers, programmes will fail. The enabling themes that dominated the review were:

1. SQEP **resources** in TLB NAME, the Programme and its delivery partners.

2. A lack of mature TLB NAME **enterprise-level artefacts** (e.g. architecture) and authority.

3. Challenging **approval processes** and timelines not aligned with Spiral Development.

4. **TLB PORTFOLIO support** still maturing post TLB NAME OPERATING MODEL FOC: for example, dependency management.

5.4   The previous review assessed delivery confidence of XXXXXX to be Amber because of:

1. Insufficient capacity and SQEP to effectively deliver the Programme.

2. Immaturity of SUB-PROJECT OBC and Delivery Strategy.

3. Immaturity of Integration Plan and Dependency Agreements.

5.5   This Review concluded that:

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1. The insufficient capacity and SQEP issue remains, it is outside the control of the Programme and unless addressed this programme will face issues that are likely to lead to suboptimal outcomes.

2. Progress on the OBC has been made and Project SUB-PROJECT is now on contract to deliver a Minimal Viable Product (MVP) next year.

3. Integration Plan and Dependency arrangements are not only immature but appear absent across the TLB NAME enterprise.

5.6 If points 1 and 3 are not unblocked the CAPABILITY system link between physical assets and non-physical could be compromised. The Programme Integration Strategy and Framework sets out the stark consequences of not connecting physical assets to a digital network as:

"The UK faces a dynamic threat landscape characterised by constant competition with both nation-state and non-state actors. Our adversaries are already integrating their CAPABILITY systems PROVIDE CAPABILITY. Our siloed capabilities and lack of digital connectivity hamper our agility in sub-threshold, global, persistent, and multi domain operations. Within five years it is likely that the UK will be outcompeted in understanding by its adversaries and will not be able to keep pace with the speed of information exchanges of its key allies".

Recommendations from the previous Gate Review

5.7 The Review Team evaluated the actions taken to implement the 8 recommendations made in the previous Gate Review (see Annex D). Recommendations 2, 3 and 6 are closed and the following recommendations are carried forward and/or updated, or superseded.

- Recommendation 1 with reference to **Strategic Communications**: The Programme has been unable to establish appropriately skilled resources to enable strategic communications. This impacts on the ability of the user community's readiness to accept Programme outputs and means that the objective of enhancing battlefield capabilities is at risk. We heard evidence in this review that the judgement of the approvals community who are reviewing business cases for individual projects within XXXXXX would be further enhanced by a wider understanding of the strategic landscape of the programme as a whole. This recommendation is superseded. See new Recommendations 3

- Recommendation 7 about "contemporising" the **Programme Mandate** remains open and is updated and carried forward. See new recommendation 7.

- Recommendations 4 and 5 regarding SQEP **resourcing** are closed and superseded with a single new resourcing recommendation. See new recommendation 1

- Recommendation 8 regarding **dependencies** is superseded with recommendation 1 regarding SQEP. This work requires a particular skill and merits dedicated resource to establish, embed and sustain. This is an area where a short-term injection of external support could make a big difference quickly.

Programme vision and mandate

5.8 The Review Team considered the outputs, outcomes and objectives for the programme (and the way they fit together) and confirm that they make the necessary contribution to the overall strategy of the organisation and its senior management. The

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Programme is supported by key stakeholders, but some concern was expressed about the lack of visibility and clarity about detailed plans to support delivery of the vision.

5.9   The Review Team heard enthusiasm for Project SUB-PROJECT from FRONT-LINE COMMAND, but there was less understanding from people outside of the user community about XXXXXX because of the way approval was sought for investment in the delivery of the sensors. The Programme would benefit from ensuring a clear and consistent narrative being set out at the beginning of all investment cases that describes the interconnection in the overall CAPABILITY landscape. Without this there is a risk that the strategic importance of connecting kinetic equipment to the data flows and analysis from SUB-PROJECT is not understood fully and is not given sufficient delivery priority.

5.10   The Review Team recognised that the SRO is already investigating developing the strategic narrative for the programme with the support of SENIOR STAKEHOLDER's comms lead. Effort in this area should continue to be applied.

5.11   **RECOMMENDATION The SRO to continue to establish external support to build and embed communications and engagement plans.**

5.12   The Programme Mandate, dated XXX 2019, is underpinned by a ENVIRONMENT CAPABILITY Sub-Strategy[2], considered to be the basis on which to build a Blueprint for the Programme. The strategy describes the current state (under Drivers for Change) and how the XXXXXX Programme and partner programmes will deliver the end state. There are two key dates in the Mandate, 2025 and 2035[3].

5.13   The Mandate offers the SRO flexibility to deliver the modern capability, it describes the core components of the Programme and it also explains that additional components are likely to emerge. The Programme is currently a collection of six[4] subordinate Projects, each will have an individual Business Case and Approval, significant in their

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[2] XXXXXX Sub Strategy DRAFT dated XX XXX 2019

[3] **By 2025 the Programme will deliver a CAPABILITY enterprise**, largely based on a mix of improved legacy and new capability but allowing interoperability and data sharing with wider defence and key allies in keeping with the intent of the JOINT OPERATIONAL ENVIRONMENT.
By 2035 the Programme will provide the FRONT-LINE COMMAND with a CAPABILITY enterprise with EQUIPMENT AND DATA to empower commanders at all levels with appropriate decision support. It will be enabled by a spiral developmental process, able to maintain pace with technology and the evolving threat.

[4] XXXXXX Programme Projects: SUB-PROJECT, SUB-PROJECT, SUB-PROJECT, SUB-PROJECT, SUB-PROJECT and SUB-PROJECT

own right.   The Mandate says that "The XXXXXX Programme will endure until the SUB-PROJECT capability has achieved FOC[5]".

5.14   The Review concluded much the same as the previous review, in that the vision and strategic direction of the XXXXXX Programme are likely to be enduring and whilst the scope of the Programme is clearly articulated through the XXXXXX Sub Strategy and the Mandate, there have been strategic developments since both were developed and the scope of delivery components has changed. The Programme is aware that these artefacts need to be updated.   The previous review recommended "the Programme Mandate, in particular its scope, should be contemporised to underpin appropriate capability delivery." This review concludes that the Sub-Strategy should be reviewed alongside the Programme Mandate to ensure alignment between the XXXXXX's end state and delivery of critical milestones.

5.15   If the documents are not updated and aligned with a detailed roadmap to show the critical path from now through to 2035, they will become irrelevant and not representative of strategic developments (including latest technologies), ultimately not matching expectations of the FRONT-LINE COMMAND.

5.16   RECOMMENDATION: Programme Mandate - The Programme Mandate should be updated alongside a review of the Sub-Strategy to underpin appropriate capability delivery and to ensure alignment between the XXXXXX's end state and delivery of critical milestones.

Resourcing SQEP

5.17   Issues of under-resourcing and inadequate SQEP in the workforce was an enduring theme throughout the review; every person interviewed cited resourcing as significant issue with demand exceeding supply, both in terms of numbers and skills. The TLB NAME-led XXXXXX Programme team, the Delivery Agents and the wider TLB NAME enterprise all report to be suffering.   Despite the Programme repeatedly reporting the Skills and Capability issue Red in the Programme Traffic Lights, and historic Programme reviews raising the issue, the issue remains and is getting more problematic.

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5.18 The Review Team saw examples of inadequate resourcing, which included:

- To date DELIVERY ORGANISATION have been unable to stand up a team to support the Programme, this has led to the programme stepping in and undertaking activities that they would otherwise not have to do or are skilled to do.

- The Programme is highly dependent upon a small number of highly skilled individuals. These individuals are experienced project/programme delivery practitioners and knowledgeable about TLB NAME ways of working. There is a risk that these individuals are single points of failure and the success of the Programme is dependent upon either their retention or that replacements are given the time to enable a handover of responsibilities.

   There are desk level issues, for example one desk officer (aka Capability Manager) undertaking several roles, such as: the Capability Manager role in pan-DLOD development, requirements management, business case development, project management tasks including schedule development and risk management. There is a mismatch between the skills required for these roles and that of a traditional desk officer. The Review Team also heard that some Desk Officers are also managing in-service capabilities.

   This lack of experience and capacity can drive poor behaviours and it is important that desk officers understand change management. A fundamental misunderstanding perhaps is that that equipment or an application is not a capability in itself, this is reported further in from paragraph 5.23.

5.19 The risks identified in the last review remain relevant a year later: "Resource and SQEP shortages are seriously threatening programme delivery through a lack of operating capability and absence of any organisational resilience, significant disruption cannot be discounted", and "the presence of substantial resourcing pressures in terms of capacity are causing the overheating of staff to the extent that in the absence of any organisational resilience programme delivery is seriously threatened."

5.20 There is a risk that this behaviour continues and causes divergence from wider enterprise needs or prevents the XXXXXX Programme delivering capabilities critical to the effectiveness of the FRONT-LINE COMMAND's wider eco-system of physical equipment, personnel and digital transformation, which in turn could impact on the connections being developed with the INTERNATIONAL PARTNER and NATO.

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5.21   The Review Team learned that the Programme is being proactive in trying to overcome the issue and is undertaking a Workforce Planning exercise using the Resource Management Framework[6]. This exercise will strengthen the narrative of the resourcing challenges which are being faced by programmes across the TLB PORTFOLIO and beyond. This should help to focus conversations on the SQEP required and the impact on programme objectives of not having the right skills, at the right time and in the right place.

5.22   RECOMMENDATION: Resourcing - The SRO to continue with the workforce planning exercise to be absolutely clear on resource requirements to deliver the full scope of the Programme, and to define how scope would have to be tailored to match resources allocated

Business Change / Readiness to Accept Transformation

5.23   The Review Team heard from the user community that they welcomed the XXXXXX Programme's objective to bring coherence and connection between data collection/analysis and the sensors and effectors deployed in the battlespace.

5.24   However, the Review Team did hear from users that whilst confidence was high that the XXXXXX outputs will be delivered, there was some concern that users may not exploit the capabilities being delivered to them, primarily because the benefits of the Programme still need to be fully understood and business change work needs to be matured. A lack of understanding of the benefits may lead to suboptimal training and preparation to fully exploit the opportunities that are presented by the technologies which may undermine the benefits of the Programme. The Review Team understands that SUB-PROJECT will explore the skillsets required to deliver the future CAPABILITY

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[6] The Resource Management Framework is for anyone who needs to:
1. Know what resources are required on the project or programme, by type and by time.
2. Understand the impact of change in workforce numbers, and by type.
3. Quantify the impact when gaps materialise.
4. Provide data to support evidence-based decision-making, for example aligning resource requirements with wider workforce planning decisions.

The framework provides a common language aligned with the Project Delivery Capability Framework and the Capability Management and Acquisition Performance Framework.

enterprise but has yet to be funded. In the meantime, the importance of strengthening the narrative is key.

5.25 The Review Team heard that the structures to manage the broad remit for acceptance of change into operational commands do exist. The Review Team heard that they are not sufficiently robust to ensure that the appropriate level of capability is delivered. It should be well understood that the operational commands require more than the equipment and application being delivered. To be operationally effective work needs to be done to ensure all appropriate DLOD elements are built into the overall capability landing safely, e.g. training, infrastructure, stakeholder engagement in conjunction with physical assets or digital services.

5.26 The challenges with SQEP, mentioned earlier in this report, mean that Desk Officers are stretched beyond their capacity, or in some cases capability, to manage the transition of programme outputs into operational service. Ideally, each project should have its own a skilled Business Change Manager, overseen by a dedicated individual at Programme level to ensure strong connections between project deliverables, programme outcomes and the operating theatre. The XXXXXX Programme Board should apply Go/No Go criteria to each project deliverable before handover to battlefield users. The risk of not investing more resource into business change is that equipment may be delivered to the battlespace and not be exploited by the users, which means cost will be incurred without commensurate benefit.

5.27 **RECOMMENDATION: Resourcing - The SRO to continue with the workforce planning exercise to be absolutely clear on resource requirements to deliver the full scope of the Programme, and to define how scope would have to be tailored to match resources allocated**

SUB-PROJECT Delivery Confidence

5.28 The backbone of the XXXXXX Programme is the overarching system architecture - the Future Integrated Tactical CAPABILITY System - which is being delivered by SUB-PROJECT.   The Programme Mandate says: "the XXXXXX Programme will endure until the SUB-PROJECT capability has achieved FOC[7]". A key milestone in the

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Mandate is 2021 for SUB-PROJECT Strategic Outline Case approval. This milestone was met.

5.29 At the previous review the Programme was at the early stages of drafting the SUB-PROJECT Outline Business Case and the Review Team were concerned about its maturity. However at the time of this review the Review Team noted significant progress has been made; a 24-month contract was placed with Industry in the summer to deliver a Minimum Viable Product (MVP) next year. The Review Team heard that the next stage is to work up competition with a system integrator to develop the concept at scale. Interviewees were confident that the Programme is on track to meet the 2025 MVP milestone.

5.30 Nonetheless, attaining the next milestone is not without risk given the resourcing challenges that the Programme's Delivery Partner, DELIVERY ORGANISATION, face. Without DELIVERY ORGANISATION resources, the XXXXXX Programme team in TLB NAME are overseeing delivery whilst the associated budget and responsibility to manage the contract remains with DELIVERY ORGANISATION, who hold the Programme to account for the delivery of the MVP rather than vice versa.

5.31 As highlighted in the previous review, it is crucial to agree and articulate how the transition of the MVP to concept work between the XXXXXX Programme and DELIVERY ORGANISATION will be managed. The Review Team heard that two dedicated DELIVERY ORGANISATION personnel were due to start in the coming months. It is the Review Team's opinion that it is critical this resource is ringfenced to support the delivery of XXXXXX. Without DELIVERY ORGANISATION resources in place this will replace additional strain on the programme's already stretched resources to fill the gap.

5.32 **RECOMMENDATION: Resourcing - The SRO to continue with the workforce planning exercise to be absolutely clear on resource requirements to deliver the full scope of the Programme, and to define how scope would have to be tailored to match resources allocated**

5.33 The Review Team heard that Project SUB-PROJECT had received positive feedback from users during early alpha/beta test phases. It is evident that stakeholders understand the intent of SUB-PROJECT. However, this understanding is not universal and there is work to be done to communicate the detailed plans, benefits and purpose

of this project to all stakeholders. This is necessary to maintain momentum and be clear on the importance of the interdependencies between the intelligence and sensor fusion capability delivered by SUB-PROJECT and the physical assets being delivered by other projects within the Programme. The delivery of SUB-PROJECT is central to the overall success of XXXXXX and is essential to be able to exploit information in near real-time and operate at a significantly faster pace in the tactical battlefield.

Dependencies, Interdependencies and Integration

5.34 There are a significant number of dependencies, interdependencies and integration challenges that XXXXXX need to manage; not least the Programme needs to integrate with other TLB NAME programmes, OTHER FRONT-LINE COMMANDS and the INTERNATIONAL PARTNER/NATO, to enable the appropriate level of interoperability.

5.35 The previous review reported "mixed views on integration and dependencies, which translates into uncertainty of programme boundaries and scope of integration", they reported that "It will be vitally important for the programme to present clarity on the scope and that an integration plan is developed". These statements remain relevant today.

Dependency Management

5.36 Dependency management, throughout the defence enterprise, was reported to the Review Team as being underdeveloped and given the Programme's many dependencies and interdependencies this immaturity adds further risk.

5.37 The Review Team heard evidence of consideration of dependencies within individual projects but there was nothing that brings dependencies together at a programme level other than brief conversations at the XXXXXX Programme Board.

5.38 Without mapping that recognises the dependencies in projects and between projects in the programme, the SRO is unable to be assured that plans are aligned and that critical milestones are not at risk. This mapping is also helpful in differentiating between dependencies that are within the control of the programme and those outside and enable better consideration at an TLB PORTFOLIO level.

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5.39 Interviewees were concerned with how dependencies are managed across the TLB PORTFOLIO, for example between XXXXXX and the OTHER PROGRAMME[8]; what was well understood by the Review Team is that XXXXXX cannot achieve its ambition without OTHER CAPABILITY. The Review Team heard the two programmes have drafted a dependency agreement and therefore there is an intent for more closer working, but dependency management across the TLB PORTFOLIO needs maturing.

5.40 This work requires a particular skill and merits dedicated resource to establish, embed and sustain. This is an area where a short-term injection of external support could make a big difference quickly.

5.41 **RECOMMENDATION: Resourcing - The SRO to continue with the workforce planning exercise to be absolutely clear on resource requirements to deliver the full scope of the Programme, and to define how scope would have to be tailored to match resources allocated**

Systems and Business Integration

5.42 The Programme has multiple system and business integration challenges that are captured in a comprehensive Integration Strategy and Framework document. Understanding of activities required to integrate SUB-PROJECT with battlefield sensors and effectors to improve the data flows to end users is maturing and will be enhanced when the emerging Programme Integration Office (PIO) is fully operational.

5.43 The Review Team heard that system integration is a complex mix of legacy systems and the introduction of new digital capabilities that must come together in a common, enterprise-wide architecture. The Programme team appears to understand this challenge, but without a detailed implementation plan the size of the challenge may be underestimated.

5.44 The Review Team observed that although work is being done to develop the thinking, system integration remains a high risk to successful delivery of the Programme's strategic objectives and some interviewees are concerned that the associated challenges are not yet clear to all stakeholders e.g. alignment of multiple plans at project level with the plan to deliver SUB-PROJECT.

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[8] OTHER PROGRAMME aims to deliver OTHER RELATED CAPABILITY

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5.45 Futures work is ongoing to develop a detailed roadmap to show how business change and technology delivery come together to deliver key milestones, both in the short term and reaching out to the end state in 2035.

5.46 **RECOMMENDATION: The SRO is to ensure that the Programme is involved in the further development of the Futures roadmap to ensure the suite of Futures artefacts can be used to drive the Programme forward and support communication pathways.**

5.47 The introduction of the Programme Integration Office (PIO) is designed to actively manage the integration of sensors and intelligence systems introduced to the Programme; and that they are integrated in a manner that realises the vision of the programme, as defined in its mandate.

5.48 The PIO is critical to the success of the Programme and will manage the application of architectural Principles across all projects and sub-programmes to ensure that integration is achieved in a viable and sustainable manner that delivers incremental value to defence. It is therefore imperative the PIO is established quickly as the forum to govern integration activity.

5.49 **RECOMMENDATION: The SRO should establish the Programme Integration Office as a governing body that that brings all system and business integration activities together.**

Leading Managing and Monitoring the Programme

5.50 The XXXXXX Programme Management Plan sets out in writing how the programme will be managed, including benefits, dependencies and change. The Review Team noted that this was missing at micro level on how these are managed in the projects and reported at a programme level. This section makes observations against each of the component parts of governing a programme of work and the maturity of key programme artefacts:

5.51 *Risk Management*: The Review Team has seen the Risk/Issues Log and the reporting on risks within the Performance Management Reporting System (PMRS). The Review Team considered that it is helpful to be clear about what is a project level risk, and where risks impact other projects and the entire programme.

Although most people the Review Team spoke to articulated resourcing as the top risk, in their view they felt it would be helpful to have an agreed narrative about the top 3-5 risks for reporting purposes. It was also noted that the most recent updates were from XXX 23, which may mean that the current situation has moved on, which is a risk in itself.

The oversight of risks at the Programme Board may be insufficient as the example papers we saw had a 5 minute agenda item for risk. This issue is picked up in a wider recommendation on programme artefacts.

5.52 *Progress Reporting*: Milestone reporting is unclear. It shows completed milestones as well as those that are ongoing, making it difficult to pick out milestones that are critical to the successful delivery of the programme objectives. The risk is that the programme is making it more difficult to focus on critical milestones at both a project and programme level. At a programme level it is not clear if there is sufficient understanding of the impact of not meeting a milestone on other projects within the Programme and outwards across the TLB NAME and Defence Portfolios.

The quarterly reporting pack is comprehensive, at over 30 pages. In building on the points above the Review Team did think that it would benefit from an overarching narrative that brings together progress on critical milestones, risks/issues and dependencies.

5.53 *Dependency Management*: (from paragraph 5.35) There is no dependency mapping.

5.54 *Interoperability Management*: Interoperability with INTERNATIONAL PARTNER counterparts must be factored into planning and decision-taking.   The Review Team heard that lessons are being learned from the INTERNATIONAL PARTNER system delivery.

5.55 *Scheduling*: Multiple plans exist but there is a risk of creating alignment tensions in the absence of a single programme schedule. This is discussed in the Dependency Management section (paragraph 5.35) .

5.56 *Stakeholder Management:* Since the last review, a programme narrative has been developed as part of a 'branded' pamphlet and the Programme team are investigating developing a programme video with the help of SENIOR STAKEHOLDER's comms lead staff officer. It does not overcome the need for a Strategic Comms Plan but is a step in the right direction. A communications and engagement plan is critical to the

success of the Programme; and given the quality of the CAPABILITY Brochure the Review Team observe that the Programme is missing opportunities to inform all stakeholders of the critical nature of XXXXXX and its progress.

5.57 **RECOMMENDATION: Communication and Engagement** - **The SRO to continue to establish external support to build and embed communications and engagement plans.**

5.58 *Change Control:* Change control is evident within projects but it is not sufficiently robust for a Programme of this size and complexity. The Review Team heard about how change control is being managed within projects, however they did not see artefacts showing rigour applied to change control across the programme.

5.59 *People:* The Review Team were impressed with the people working in the XXXXXX Programme, with a wealth of good knowledge and skills and the SRO was praised by the people we spoke to for his leadership. Nevertheless, the Review Team were concerned at the dependency on a core group of people, with a large amount of information in their heads rather than committed to paper. This is compounded by the TLB NAME rotation every 24-36 months of key posts and every 36 months for the Programme Director and Programme Manager, which results in the SRO having to constantly manage the risks of gapping in an organisational design that lacks depth and therefore resilience.

5.60 *Governing Bodies:* Building on the point above it was clear that the presence of the SRO is felt in every project and board. The Review Team understood the rationale for why he has had to operate in this way, but this is not effective use of SRO time and may well be masking the significance of the resourcing challenges.

The emerging Programme Integration Office (PIO) is a forum that intends to bring together various technical strands of the programmes. This will enable a coherent approach to the delivery of the XXXXXX capabilities and bring end users into the discussions. This governing body is critical to the delivery of the Programme.

There was a lack of visibility to the Review Team as to where decisions are taken, which of the governance groups make decisions as opposed to advise. The Terms of Reference (ToR) for the Programme Board is a lift from the generic TLB NAME ToR for a Programme Board. The Review Team suggest that consideration should be given to reviewing the ToR for each project board and the programme board to ensure its

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appropriateness, including looking at frequency, membership and escalation routes from project level into the programme board and beyond.

Alongside the Programme Management Office (PMO) and the new Programme Integration Office (PIO), the Programme is setting up a Joint Planning Office (JPO) for SUB-PROJECT (recommended in the last review report). The Review Team observed that there were opportunities here to achieve economies of scale with a view to having a fully integrated performance reporting hub and oversight approach.

The XXXXXX Programme Governance is a complicated landscape and during the review the Review Team heard the need for appropriate authority for decisions and actions. For example, the XXXXXX System Design forum which we think is the equivalent of a Technical Design Authority but is not a formal governing body.

5.61 RECOMMENDATION: Governing Bodies – The Programme Director should provide clarity of all the boards and working groups that contribute to running of the Programme to help the SRO to identify any gaps/duplication.

5.62 In summary, The Review Team has seen a range of artefacts, along with a tracker setting out what is in progress and not yet started. There are some gaps but, on the whole, there is a reasonable range of products. The issue is more about bringing those products to life on a day-to-day basis and keeping them updated when progress is made.

5.63 The Review Team concluded that the programme would be better pointing limited PMO resources to the sequencing of artefacts and a smaller number that are kept updated – blueprint with working assumptions, critical path, risks/issues, change control, dependencies, approvals/decisions.

5.64 One area where there is less maturity is in the plans that sit beneath the strategies. For example, there is a Communication Engagement Strategy but not an engagement plan that sets out how it will be delivered.

5.65 RECOMMENDATION: Artefacts – The Programme Director should focus efforts into a smaller range of artefacts, that can be matured and add value in the overall reporting. The suggested smaller suite of products to include a blueprint with working assumptions, critical path, risks/issues, change control decisions and application, dependencies, approvals/wider decisions.

6. Areas of good practice

This section reports on what is being delivered successfully and the areas that the Review Team commend the Programme team on.

Commending delivery of	Describe specific details of successful delivery
CAPABILITY Brochure	Sets out a compelling narrative of how FRONT-LINE COMMAND's ways of working can be transformed through delivery of XXXXXX.
Informal working relationships and transparency	The SRO and Programme team work hard to speak with all stakeholders outside of formal governance arrangements.
SRO leadership style	The SRO's open and inclusive leadership style promotes trust amongst stakeholders and delivery agents, which in turn increases confidence in the XXXXXX programme.

7. Acknowledgement

Review Team Acknowledgement
The Review Team would like to thank the SRO, Programme Team and everyone interviewed for their time, constructive feedback and insight. We would like to offer special thanks to XXXX XXXX and XXXX XXXX for all their hard work and patience in supporting this review.

8. Next Assurance Review

Next Assurance Review

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12 months annual review.

ANNEX A – Stage Gate Assessment (SGA) Descriptions

Colour	Criteria Description
Green	Successful delivery of the programme/project to time, cost and quality appears highly likely and there are no major outstanding issues that at this stage appear to threaten delivery. *Recommendation: The programme/project is ready to proceed to the next stage.*
Amber	Successful delivery of the programme/project to time, cost and quality appears feasible but significant issues already exist requiring management attention. These appear resolvable at this stage and, if addressed promptly, should not present a cost/schedule overrun. *Recommendation: This programme/project can proceed to the next stage with conditions but the programme/project must report back to the IPA and HMT on the satisfaction of each time bound condition within an agreed timeframe.*
Red	Successful delivery of the programme/project to time, cost and quality appears to be unachievable. There are major issues which, at this stage, do not appear to be manageable or resolvable. The programme/project may need re-baselining and/or its overall viability re-assessed. *Recommendation: This programme/project should not proceed to the next phase until these major issues are managed to an acceptable level of risk and the viability of the project/programme has been re-confirmed.*

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ANNEX B - Terms of Reference

This is a Gate 0/3. The standard terms of reference for all Guidance and Workbooks can be found **here**.

In addition to the standard terms of reference. the SRO is seeking a high-level view of the complexity and ambition of the programme vs the resource level. The sub-programmes are fast moving towards delivery from concept/assessment and does the Review Team think that the Programme will we hit a higher tempo of work in the delivery phase that exposes our resource challenge and adds to the pressure.

- Governance structure across the whole programme. Is SUB-PROJECT resource an issue? A move from assessment into delivery will increase demand on the Cap Mgr with x-DLoD work transition to BaU and focus on the IMS.
- Review of the ambition of SUB-PROJECT (confidence of delivery):
  - Perspective on the schedule & x-DLoD picture with an MVP to be delivered in 2024.
  - Is the resource model maturity reasonable?
  - Perspective on the DELIVERY ORGANISATION MIX preparedness to mobilise.
- User Community capacity and readiness to accept transformation.
- Strength of the relationship with the delivery teams and the transparency of reporting.
- Maturity of artefacts (including plans to develop) against a benchmark. What is a reasonable set of artefacts expected for a programme of our size and stage of lifecycle? (what is the scale of risk they might be carrying?)

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ANNEX C - Background

This Project Team prepared this section in advance of the Review.

Question	Answer
Describe the aims of the project/ programme	Vision: The XXXXXX Programme will deliver a system of EQUIPMENT that can PROVIDE CAPABILITY. The bedrock of the system will be EQUIPMENT, designed to be fully interoperable with future FRONT LINE COMMAND CAPABILITY, wider Defence CAPABILITY and our allies. This will enable a CAPABILITY consisting of multiple EQUIPMENTS, that can be centrally commanded and coordinated within a wider Defence and Allied enterprise.
Reasons for the project/ programme's existence, by type and description	It is critical that the FRONT LINE COMMAND has a CAPABILITY. The XXXXXX programme will modernise our CAPABILITY. EQUIPMENTS will be integrated with each other and with the wider Defence CAPABILITY enterprise. Automation will transform our CAPABILITY. Open standards will enable low-cost, high-tempo upgrades, integration and flexibility.
The impact if the project/programme fails to deliver e.g. any risks to or any material impact on civilians/citizens:	A failure to modernise the FRONT LINE COMMAND to keep pace with adversaries. The programme is a critical component of the FRONT LINE COMMAND's modernisation with clear links to the Integration Review intent and OTHER PROGRAMME.
Project/programme link to departmental or government strategies or policies:	Links to the Industrial Strategy with export opportunities, scope to strengthen international co-operation and to increase UK prosperity with interest/involvement of UK companies or those with UK offices/departments.

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Projects/programme interdependencies [if applicable]:	Key TLB NAME programmes: OTHER PROGRAMME OTHER PROGRAMME OTHER PROGRAMME OTHER PROGRAMME OTHER PROGRAMME OTHER PROGRAMME OTHER TLB programme: OTHER PROGRAMME – looking at strategic information (SUB-PROJECT seeking to incorporate strategic data).
Has the SRO's Osmotherley letter (letter of appointment) been approved at the appropriate levels?	Yes, but not yet agreed by SRO
The procurement / delivery status:	SUB-PROJECT on contract; SUB-PROJECT and SUB-PROJECT past OBC; SUB-PROJECT past SOC
Funding / Business Case:	All projects have past following business cases XXXXXX- SOC; SUB-PROJECT – OBC; SUB-PROJECT – FBC; SUB-PROJECT -SOC; SUB-PROJECT – OBC 1

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Integrated Assurance and Approval Plan (IAAP):	In place, endorsed by DAPD
Programme/Project plan:	Snapshot of integrated master schedule will be shared with RT
Current position regarding previous IPA assurance reviews:	Outstanding actions from last review. RPA score not changed in last 12 months

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ANNEX D – Progress against previous assurance review

No	Summary of risks, issues and related recommendations from the original recommendation	Critical/ Essential/ Recommended	Status
1	**Strategic Communications** - Explore opportunities and **establish appropriate skilled resources to enable strategic communications** as a formal part of the XXXXXX Programme.	Essential	Superseded by this review
2	**Business Change** – Capitalise on the direct access to the **BCM skilled resource** to support the development of benefits definition, benefits management, and support strategic communications for the XXXXXX Programme	Critical	**Closed** The Programme has direct access to a Business Change Manager (BCM)
3	Business Case **-** The **SUB-PROJECT OBC** to include a clear exposition of how the sub-Projects are to be integrated into the SUB-PROJECT system and how roles and responsibilities for these tasks are to be transitioned from XXXXXX Programme to DELIVERY ORGANISATION as the SUB-PROJECT evolves through OBC1 and OBC2 up to delivery of the MVP.	Essential	**Closed** Progress on the OBC has been made and SUB-PROJECT is now on contract to deliver a Minimal Viable Product (MVP) next year
4	**Skilled Resourcing** - Consideration of the early implementation of a **workforce planning capability** to support the complex, emergent nature of XXXXXX will provide benefit that might also be exploited across the broader TLB NAME Portfolio.	Essential	Superseded by this review
5	**Skilled Resourcing** - Pending the successful prosecution of Recommendation 4 on implementation of a workforce planning capability,	Critical	In progress

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	that a **stopgap solution is implemented that covers XXXXXX Programme's immediate resource issues.**		
6	**SUB-PROJECT JPO - A SUB-PROJECT Joint Planning Office (JPO**) is put in place by the SRO to govern programmatic and technical activities across multiple DELIVERY ORGANISATION, JHC and TLB NAME value streams.	Essential	**Closed** Review Team heard that the Joint Planning Office is emerging as an integral part of the XXXXXX Programme governance, used by the SRO to maintain oversight of technical and business activities across multiple workstreams.
7	**Programme Mandate** - The Programme Mandate, in particular its scope, should be contemporised to underpin appropriate capability delivery**.**	Essential	Carried forward by this review
8	**Dependencies** - Ensure that the constraints of OTHER PROGRAMME are proven and understood through the assessment phase, together with the effectiveness of XXXXXX mitigations, and communicated to stakeholders at the earliest possible stage and are included in sub-project options analysis.	R'mended	In progress

ANNEX E – List of Interviewees

The following stakeholders were interviewed during the review:

Name	Organisation and role
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	CEFT (Central Equipment Finance Team)

XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX
XXXX XXXX	XXXX XXXX

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ANNEX F – Recommendation Classifications and Priority Order

There are 13 classifications in the classification set; Review Teams are asked to record the classification reference number of each recommendation as per the table below.

#	Classification	Definition
1	Governance	Recommendations related to the oversight, structure and decision making of a project/ programme. This theme also includes recommendations relating to alignment with pan-government priorities, strategies and controls.
2	Stakeholder Management	Recommendations related to relationships with all parties with an interest in the outcome of the project/programme, whether internal to the agency, internal to government or external.
3	Programme and Project Management	Recommendations related to all aspects of project, programme and portfolio management, but excludes recommendations on Risk, Issues and Dependency Management (Theme 9) and Resource Management (Theme 10)
4	Change Management & Transition	Recommendations related to the Management of Business Change – all the work required with and in the business and with the customer to make ready for the initiative, in terms of changes to business processes including: business continuity planning, changes to work processes and resourcing, changes to organisational structures and staffing to support transformational or process changes to business delivery to ensure a smooth transition to BAU It does not include Technology Readiness for Service (Theme 12).
5	Financial Planning and Management	Recommendations related to financial planning, organising, directing and controlling of financial activities.
6	Benefits Management & Realisation	Recommendations related to the identification, ownership, measurement and realisation of benefits and dis-benefits. Benefits can be either financial or non-financial.
7	Commercial Strategy & Management	Recommendations related to the end-to-end procurement process including: Procurement strategy and planning, Approaches to the market, Contract negotiation and Contract management.

8	Context, Aim & Scope	Recommendations that are aimed at the clarity of the change to be implemented. It covers alignment to vision, strategy and policy; the purpose, objectives, justification and description of the change; and the determination of success and the necessary environment to ensure success.
9	Risk, Issues & Dependency Management	Recommendations related to the identification, analysis, impact assessment, response and the on-going review and management of Risks, Issues and Dependencies (i.e. outputs that are required by a project to succeed, but which will be delivered by parties not under the direct control of the project).
10	Resource & Skills Management	Recommendations related to all aspects of the identification, supply, optimisation, prioritisation and maintenance of resources and appropriate skills.
11	Knowledge Management	Recommendations related to the process of capturing, developing, sharing, and effectively using organizational knowledge. It includes sharing knowledge and experiences or Lessons Learnt.
12	Technology	Recommendations related to all technology issues, including the alignment of the technology solution to the technology and business strategy, the integration of one or more technology **solutions, th**e operational readiness of the solution (including testing of the solution), and all aspects of security relating to the technology solution.
13	Other	To be used only when other classifications do not apply.

Each risk-based recommendation will be recorded as Critical / Essential or Recommended:

- **Critical (Do Now):** To increase the likelihood of a successful outcome it is of the greatest importance that the programme/project should take action immediately.
- **Essential (Do By):** To increase the likelihood of a successful outcome the programme/project should take action in the near future. [Note to review teams – whenever possible Essential risk-based recommendations should be linked to programme/project milestones e.g. before contract signature and/or a specified timeframe e.g. within the next three months.]
- **Recommended:** The programme/project should benefit from the uptake of this recommendation. [Note to review teams – if possible Recommended risk-based recommendations should be linked to programme/project milestones e.g. before contract signature and/or a specified timeframe e.g. within the next three months.]