File reference: DATE-PROGRAMME-RN5 v4.0-IAC-BC-OS

References:

- A. PROGRAMME, Category X, Information Note, dated DATE
- B. PROGRAMME Review Note 4 (CAT X) (IAC 5805) dated DATE
- C. PROGRAMME Programme Mandate Version 2.0 DATE
- D. DATE-PROGRAMME RN5 Scope-Investment Appraisal-OS.

PROGRAMME PROGRAMME REVIEW NOTE 5 (CAT X) Executive Summary

The PROGRAMME programme is exploiting REDACTED. The disruptive technology will increase performance and reduce risk to personnel. PROGRAMME is currently delivering systems, whilst also completing the Assessment Phase. Delays to the programme means that a robust Full Business Case (FBC) will not be presented until DATE. This Review Note seeks approval to extend the AP, start critical path activity and streamline delivery by rationalisation of PROGRAMME approvals. It intensifies the agile, spiral development approach to delivery without locking down the solution, protecting choice for the future in a rapidly developing capability area.

Issue

Review Note 5 (RN5) is seeking approval to extend the PROGRAMME AP into FY DATE & FY DATE, commence early critical path activity prior to FBC and consolidate extant PROGRAMME approvals into a single Approved Budgetary Limit (ABL).

Timing

1. **Routine**. The current PROGRAMME Assessment Phase time approval was for years 6-10 which ends in DATE. Continuity of funding is required from this point into DATES in order to complete the AP scope and inform the planned

FBC, which will seek approval by DATE, as indicated in the PREVIOUS PROGRAMME Information Note (Ref A).

Recommendations

- 2. The Investment Approvals Committee (IAC) is invited to **approve**:
 - a. Uplift PROGRAMME approval by £XXXX (£XXXX CDEL, £XXXX RDEL, £XXXX RMC, £XXXX PSS and £XXXX LOCATION PSS) (all inclusive of non-recoverable VAT)), for the commencement of critical path activity, as Tranche 1, in years DATES, to protect the capability plan.
 - b. Extension of the PROGRAMME AP (due to delays with the programme), reprofiled in to DATES, so that the AP scope can be concluded and learning from experience (LFE) can better inform the FBC investment recommendations.

- c. Consolidation of the requested uplift and extant PROGRAMME into a single PROGRAMME ABL, marking the transition to a single standardised solution.
- 2. This will give a total <u>revised</u> ABL (outturn, inclusive of all non-recoverable VAT) of £XXXX.

3. The IAC is invited to **note:**

- a. will remain within current AP cost ABL, as reprofiled in PCR YEAR to align with delays, and continue to deliver existing AP scope including solution definition, autonomy development and other trials and de-risking activity.
- b. Tranche 1 (this initial critical path scope) will utilise the requested ABL uplift to begin Mission System integration at a 'System of Systems' level, establish enduring training facilities, provide critical infrastructure to host PROGRAMME systems and maintain other critical-path acquisition activity.
- Tranche 1 will also include solution development, including competition as appropriate, to obtain contract quality costs to inform FBC and meet the DATE delivery requirement.
- d. The PROGRAMME candidate Key User Requirements (cKURs) are presented at Annex A.
- e. The PROGRAMME strategic programme is summarised at Annex B.
- f. The transformational change that this programme is pursuing in the face of rapidly evolving technology and threats demands an agile, spiral development approach rather than a traditional waterfall approach.
- g. The combined PROGRAMME sunk costs (out-turn) at AP12 DATE are £XXXX (£XXXX AP and £XXXX). A PROGRAMME approvals summary is at Annex C.
- h. An estimated DELIVERY ORGANISATION OPEX cost of £1XXXX and ORGANISATION OPEX Cost of £XXXX to DATES for all scope. The OPEX provision will come out of the associated IR DATE/ABC DATE settlement
- i. The total equipment acquisition ROM cost estimate for the PROGRAMME programme is c£XXXX with a whole life cost over X years of c£XXXX. is excluded as it is currently unfunded.

Strategic Case

4. **Strategic Context.** REDACTED

¹ The current In-Year position will be made available within the progressive supporting evidence pack.

- 5. **Requirement**. Critical capability is currently provided by REDACTED. PROGRAMME cKURs were presented at Initial Gate Business Case (IGBC) and remain stable. They have been subject to refinement through regular cKUR and User Requirement Document (URD) reviews, underpinned by Operational Analysis (OA), AP studies, peer review and collaboration with COUNTRY. Joint Requirements Oversight Committee (JROC) have been consulted and full committee presentation will be made prior to FBC submission. ORGANISATION have produced a supporting paper, which details the OA conducted to date and an overview of the OA intended to be undertaken to support FBC.
- 6. **Strategy**. The overarching PROGRAMME strategy remains unchanged since previous approvals (Ref B) and a refreshed Programme Mandate (Ref C) has been endorsed by the NEC in DATE. PROGRAMME will maintain a continued focus on the deployment and integration of REDACTED.
- 7. The capability will be delivered using REDACTED. The Context Picture is at Annex D.
- 8. **Delivery Approach.** The PROGRAMME programme will be delivered through a phased approach which will include three distinct procurement blocks, each building on previous deliverables:
 - a. Delivering REDACTED to provide an Initial Operating Capability (IOC);
 - b. Subject to FBC approval, delivering the enduring solution by REDACTED; and
 - c. Providing a Full Operating Capability (FOC) but is currently unfunded and will be considered at IR DATE.
- 9. PROGRAMME is being managed as a programme, delivering capability incrementally through tranches of projects and the constituent projects within the programme are at different stages of the CADMID cycle. The PROGRAMME has many VUCA (Volatile, Uncertain, Complex and Ambiguous) characteristics. It needs to deliver and sustain a viable capability as REDACTED. Adopting Infrastructure and Projects Authority (IPA) best practice for a programme such as this, agile thinking and spiral development can better facilitate change from rapidly evolving threats and advancing technologies, leading to a more flexible and responsive development approach. LFE from the Assessment Phase and is informing what the Minimum Viable Products will need to be.

Economic Case

- 10. The Economic Case presented in the PROGRAMME IGBC and OBC remains extant. PROGRAMME capability will provide REDACTED.
- 11. Ref A explained that DATE was unlikely to be the optimal timing for FBC and that it was the intention to present a RN in DATE for approval by DATE. Although delays were partly mitigated, the first DELIVERABLE is not expected to be delivered until DATE, with final deliveries in Q4 DATE. LFE from is already being captured and used to optimise the proposition.
- 12. It is necessary to extend the timing of the AP, by X years, to ensure a robust FBC, informed by LFE. The AP schedule has been adjusted accordingly.

13. In parallel, it is necessary to initiate Tranche 1 now for planned critical-path activity, to protect the IR DATE capability plan and mitigate schedule risk. Further detail is contained within the RN5 Investment Appraisal (Ref D). The Tranche 1 deliverables are adaptable and flexible and do not tie the programme into a specific solution. They include:

REDACTED

Commercial Case

- 14. For the RN5 scope, there are three distinct categories of commercial activity:
 - a. Continuation of current Assessment Phase activities including research, trials and testing, procurement of a range of other enabling services and activities;
 - b. Continuation of Operational Evaluation and any necessary enhancements & improvements to the existing capability based on LFE; and
 - c. New Tranche 1 will be a mixture of procurement and preparatory commercial work undertaken by DELIVERY ORGANISATION, ORGANISATION 1 and ORGANISATION 2.
- 15. For all requirements where no extant contracts exist, competition will be the default route to contract. However, given that much of the RN5 scope is a continuation of existing capability delivery, the route to contract is highly likely to be determined by the contractual arrangements entered following previous approvals. A number of contracts remain extant and have Contractual Options (both funded and unfunded) to facilitate extension in terms of both time (for Service provision) and volume (for equipment provision). All contractual arrangements will continue to fully comply (unless appropriate exemptions are granted) with the requirements for transparency, advertising and associated regulations (principally DSPCR).
- 16. Where extending an existing contract, but no valid Contractual Options exist, Legal Advice will be sought to determine whether the existing contract can be extended by formal contract amendment (supported by a Voluntary Transparency Notice if necessary) or whether new contract action should be pursued.
- 17. Similarly, whilst Firm Pricing will be the expected norm, the full range of compliant pricing mechanisms will be used and deployed as appropriate, reflecting both the maturity of the required capability and the prevailing market dynamics. The Department's current policy on adopting VoP for contracts over 2 years duration or shorter where significant pricing fluctuations and instability precludes the agreement of acceptable Firm Prices will be adhered to.
- 18. Part of the -Tranche 1 funding will enable maturation and refinement of candidate solutions, with a market engagement leading to contract quality costs to support the FBC submission.

- 19. Notwithstanding the fact that many aspects of work detailed above are still being formulated, the Commercial Strategy details the proposed routes to contract for the aspects of work within the stated 'categories of commercial activity'.
- 20. Procurement and commercial strategies have been produced for the RN5 scope, however, the full strategy will be addressed by the FBC, where it will also detail the application of Category Management and the wider interface and coherence with the REDACTED Centre of Expertise although both activities have already commenced and will develop during the timeframe covered by this RN.

Financial Case

- 21. The requested ABL of £XXXX uplift is predominantly made up of -Tranche 1 (£XXXX) however, it also includes a small amount of PSS for REDACTED (£XXXX).
- 22. The Tranche 1 uplift costs are based upon the PROGRAMME Should Cost Model' which has undergone appropriate Validation & Verification. The estimated costs, including risk and uncertainty, are in Table 1 and a breakdown of the P50 for each of the subelements, is shown in Annex E:

		Estimated Cost (£M)	
	10%	50%	90%
- Tranche 1	£XXXX	£XXXX	£XXXX

Table 1 - - Tranche 1

- 23. Inflation has been applied to the cost model utilising the standard Defence Economics indices. Version 4.7 of the model was used to generate PROGRAMME's PCR2-DATE inputs, which informed ABC DATE. As this was from data frozen in DATE, the model has been refreshed, to reflect DATE inflation rates and risk profile, as v4.8.1. This has resulted in some variances between the P50 estimated costs and the provision profile in years 1 and 2.
- 24. Affordability of Tranche 1 against the PCR2-DATE and is shown in Table 2. Noting that the provision includes all scope. Therefore, in FY DATE onwards there is an excess, which reflects the forecast cost for the remaining elements not covered by RN5, which will be subject to FBC:

		PROGRA	MME - Re	eview Note	5 - Affordal	oility (£M)		
FY		YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	Total
Forecast	CDEL	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
Cost at	RDEL	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
50%	RMC	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX

| Confidence
(P50 value) | Total | XXXX |
|---------------------------|-------|------|------|------|------|------|------|------|
| Provision | CDEL | XXXX |
| (PCR2- | RDEL | XXXX |
| DATE) | RMC | XXXX |
| | Total | XXXX |
| Variance | CDEL | XXXX |
| | RDEL | XXXX |

| (-ve | RMC | XXXX |
|---------------------------------------|-------|------|------|------|------|------|------|------|
| represents
excess in
provision) | Total | XXXX |

Table 2 - PROGRAMME - Tranche 1 - Affordability Table

25. The AP reprofile and requested uplift is affordable within the provision in terms of volume across the ten-year period. However, there remains a low level of profiling issues in Year 1 and 2 in CDEL, RDEL and minor RMC. The SRO has worked with the Finance

Business Partner (FBP) to identify an affordability strategy for FY DATES. The RDEL can be treated via the wider PROGRAMME programme where profiling has decreased in these years due to changes in the payment milestones proposed by EXTERNAL ORGANISATION. The CDEL can be reprioritised as a result of the latest affordability assessment set out in the SOC, which shows available CDEL headroom in FY DATES. The actual RMC consumption is difficult to forecast, but will be carefully managed within control total.

- 26. **LOCATION PSS.** The scope and supporting cases for REDACTED remain extant and this RN confirms that the PSS is within PCR2-DATE and detailed at Annex E.
- 27. **VAT.** Treatment has been confirmed and will be applied at 20% for all the Equipment.
- 28. **International Financial Reporting Standard.** IFRS16 has been considered as part of the initial procurement that this RN seeks to approve. Given the nature of the planned procurement, which seeks to purchase equipment and deliver to MOD sites, it is unlikely that IFRS16 will apply to any individual contact award implications arising for the RN5 scope.
- 29. **ABL Consolidation.** Combining the PROGRAMME ABLs will mark the transition to a single standardised solution for and provide a clearer overview of cost of providing PROGRAMME capability. The combined PROGRAMME ABL, including extant approvals and uplift is shown in Table 3, with a more detailed summary at Annex C:

	Assessment Phase				
Current Approved ABL	£XXXX	XXXX			
Total uplift requested by this RN	XXXX				
TOTAL ABL	£XXXX				
Sunk Costs to FY YEAR	XXXX3	XXXX3			
TOTAL SUNK COSTS	£XXXX				

Table 3 - PROGRAMME ABL Consolidation

30. **Accounting Policy Change.** PROGRAMME forecasts have remained within Total DEL (TDEL), however an accounting policy change in FY DATE resulted in COMPANY Research & Development costs being scored to CDEL (from RDEL). This has resulted in an increase in the CDEL forecast of £XXXX, offset by a decrease in RDEL of £XXXX. The delta of £XXXX is the current approval headroom against Programme forecasts as at AP0 FY DATE.

31. **Strategic Reserve.** £XXXX approved under the PROGRAMME OBC was approved as CDEL. An initial drawdown of £XXXX CDEL was utilised to cover the VAT element of the procurement, following a change in HMT implementation of VAT rules. The other emerging pressures from the Programme were predominately relating to support and required RDEL and inflation. Therefore, the balance of strategic reserve after CDEL drawdown was all converted from CDEL to RDEL funding as approved by the Senior Responsible Owner (SRO).

Management Case

- 32. **Governance.** ORGANISATION (NC) Top Level Budget (TLB) holder retains authority, but delegates responsibility to enable the PROGRAMME SRO NAME to deliver this Programme in accordance with the ORGANISATION Portfolio guidance, their SRO Appointment letter and the Defence Policy & Approvals Secretariat (DP&AS) Direction and Guidance for SROs^{13.} Within DELIVERY ORGANISATION, the programme is within the Director Ships Acquisition, Innovation and Future Capability Portfolio. Joint ORGANISATION/ DELIVERY ORGANISATION Pan-DLOD PROGRAMME Programme and Delivery Boards have been established, along with other lower-level Working Groups.
- 33. **PROGRAMME Progress.** Progress is summarised below, with additional context for the delays.
 - a. **Assessment Phase**. The previous phase demonstrated the significant potential offered by REDACTED. The current phase is continuing to de-risk REDACTED and completing a cost-effectiveness solution analysis. REDACTED.
 - b. (Initial Operating Capability (IOC)). is currently delivering REDACTED. Although expected to deliver within its Outline Business Case approval, delays to the UK/COUNTRY programme mean that MS are now expected to commence delivery DATE and complete by Q4 DATE and hence why the AP now needs to be extended.
 - c. **Delays.** The initial delay was primarily due to COMPANY's underestimation of the time required to resolve engineering challenges in transitioning the technology operationally to meet military requirements and addressing known shortfalls from the demonstrator contract. There have also been additional delays due to REDACTED. There is no intention to rebaseline the contract again and liquidated damages are expected to be recovered by EXTERNAL ORGANISATION.
- 34. **Gateway Review.** In DATE, the Infrastructure & Projects Authority assessed delivery confidence as AMBER. They noted that there has been significant progress in moving towards an autonomous PROGRAMME and numerous recommendations were included in the report.
- 35. **Risk**. These are managed within DELIVERY ORGANISATION SOFTWARE and subject to regular joint reviews. The principal PROGRAMME delivery & programme risks are at Annex F, with the RN5 scope providing much of the mitigation. The key risks are:
 - a. **Delivery Development.** There is a risk that (TIART) REDACTED.

- b. **Delivery Acquisition**. TIART due to the criticality of the system architecture and complexity the REDACTED may encounter manufacture, supplier or integration issues, leading to additional resource needed.
- c. **Programme FBC.** TIART due to difficult balance of investment decisions or insufficient SQEP, the FBC may be approved later than the target DATE, leading to delays to capability and misalignment of the funding profile.
- 36. **Management of Integration.** The programme has prioritised early milestones relating to development of the core and is drawing on specialist support from REDACTED. Separate contracting of a product agnostic 'Integrating Authority' as part of mission system delivery remains an option, as does reversion to the use of one or more prime contractors. The FBC will explore these options, informed by our experience of early integration work, will make recommendations on the proposed solution.
- 37. **Schedule.** The schedule summary for the RN5 scope is at Annex G. Key milestones include:

Milestone	P10	P50	P90
Design Costs and Design	DATE	DATE	DATE
REDACTED Delivered	DATE	DATE	DATE

Table 4 - Milestones

- 38. **Resources.** DELIVERY ORGANISATION and ORGANISATION have appropriate Suitably Qualified & Experienced personal and resources to deliver this scope of work, subject to the Demand Signal continuing to be met. The current Demand Signal for the DELIVERY ORGANISATION PROGRAMME Delivery Team is for X full time equivalent (FTE) employees. Through the FCR and Options Work Force Planning for ABC DATE, this demand signal raises to X from FY DATE. The ORGANISATION Programme Team has recently been expanded to include X x FTE Infrastructure posts to mitigate DLOD risks.
- 39. **Dependencies**. Dependencies are captured within the Third Order Assumptions (3OA's)/REDACTED Data Assumptions List and subject to regular pan-DLOD review at the Programme Board. In summary, the following responsibilities are captured in Table 5:

Organisation	Delivery Responsibility
ORGANISATION	Procurement of PROGRAMME Infrastructure at REDACTED.
	ORGANISATION will be responsible for Training infrastructure
	requirements.
DELIVERY ORGANISATION	Procurement of REDACTED
DELIVERY ORGANISATION	Procurement of REDACTED and Training Solution
ORGANISATION	Provision of SQEP for REDACTED
DELIVERY ORGANISATION	Provision of REDACTED
DELIVERY ORGANISATION	Procurement of REDACTED.

Table 5 - External Enabling Stakeholders

Presentation and Handling

40. ORGANISATION and DELIVERY ORGANISATION have agreed an external communications strategy for the PROGRAMME Programme and jointly maintain a media

pack, including lines to take. The Directorate of Defence Communications are regularly updated on the programme. The ORGANISATION Office have been consulted and the PROGRAMME programme aligns with current strategy.

Signature Block

NAME ROLE PROGRAMME Senior Responsible Owner DATE

List of Annexes

- A. Candidate Key User Requirements (cKURs)
- B. Strategic Programme Summary
- C. PROGRAMME Approvals Summary
- D. Context Picture
- E. Finance Summary
- F. Risk Summary
- G. Schedule Summary

Annex A Candidate Key User Requirements (Note: These are for information only and are not presented for endorsement in this Review Note.)

KUR No and Title	Description	Threshold MOE	Objective MOE
	The PROGRAMME is required to		As Threshold
	The PROGRAMME is required to		
	T		A TI 11
	The User requires that		As Threshold
	The User shall be able to		As Threshold
	The User shall be able to		As Threshold
	The User shall be able to		As Threshold
	The Oser shall be able to		AS THESHOID
	The User shall be able to		

Annex B PROGRAMME Programme Summary

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Annex C PROGRAMME Approvals Summary

Phase	Approval	Туре	Sub Date	Note	Out letter Reference
Concept Phase				Stage 1 (design)	
	xxxx	Approval Note	DATE		
	XXXX	IGBC	DATE		
	70001	1000	DAIL		
				Initial Assessment Phase	
	XXXX	Review Note 1	DATE		
REDACTED				0, 0,4	
	V0/0//	D. I. N. C.	D.4.T.F	Stages 2-4	
	XXXX	Review Note 2	DATE		
				Year 1	
	XXXX	Review Note 3	DATE	100	
				Year 2	
	XXXX	Review Note 4	DATE		
				11 186 ()/ () 5 5	
Sub Total £M	VVVV			Uplift (Years 3-5)	
Sub Total £IVI	XXXX				
		Approval	Sub		Out letter Reference
Phase	Approval	Approvai	Date	Note	
	XXXX	OBC	DATE	Procurement for REDACTED	
	XXXX		DATE	Additional cost of REDACTED	
	70001		DAIL	/ dational cost of NEB/101EB	
	XXXX	IN	DATE	Status update on the PROGRAMME	
Sub Total £M	XXXX				Out letter Reference
	70000				Out lotter Reserved
	Approval/ Uplift		Sub		
Phase	Sought	Approval	Date	Note	
/ Huse /					n/a
•		Review Note 5			
	XXXX		DATE	This RN	
REDACTED	XXXX	Review Note 5			n/a
	V0004		DATE	This RN	
Sub Total £M	XXXX				
L ABL	£XXXX				

Annex D Context Picture

Annex E – Finance Summary

a. - Tranche 1 Uplift

REDACTED

FY		YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	Total
Forecast Cost at 50% Confidence (P50 value)	CDEL	XXXX						
,	RDEL	XXXX						
	RMC	XXXX						
	Total	XXXX						
Provision (PCR2-23 & ABC23 CT	CDEL	XXXX						
Outcome)	RDEL	XXXX						
	RMC	XXXX						
	Total	XXXX						
Variance (-ve represents excess in	CDEL	XXXX						
provision)	RDEL	XXXX						
	RMC	XXXX						
	Total	XXXX						

Annex F – Risk Summary REDACTED

Annex G – RN5 Scope Schedule Summary