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Variation Request Note (VRN): Part 1 - Request

VRN No.: 1	Title: 1 year extension to ESN A2G Network Design Assurance Partner	
Contract name and Purchase Order No.: ESN A2G Network Design Assurance Partner		Respond by date:
Assigned for Impact Assessment by <i>(use if requesting an Impact Assessment before a supplier proposal to the VRN. If not used then insert "Not applicable"):</i> Not Applicable		
Assigned for Impact Assessment to <i>(use if requesting an Impact Assessment before a supplier proposal to the VRN. If not used then insert "Not applicable"):</i> Not Applicable		
Full description of requested contract change (including proposed change to the wording of the contract): The Authority request the current contract ESN A2G Network Design Assurance Partner be extended for 1 year FY 2025/2026 to a value of £1,499,770 to be awarded to Roke Manor Research Limited . This extension is to cover testing of the ESN by Fixed and Rotary wing aircraft and also drone testing, alongside ground testing, data analyse and reporting.		
Signature of Authorised Representative:		
Date of request:		

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Variation Request Note (VRN): Part 2 – Supplier's response

VRN No.: 1	Title: 1 year extension to ESN A2G Network Design Assurance Partner	
Contract name and Purchase Order No.: ESN A2G Network Design Assurance Partner		Required by date:
Milestone and key milestone dates (if any) Time and materials monthly billing		
Supplier response to Change Request Note Part 1 (or Impact Assessment) Overview Roke Manor Research Limited (Roke) has a long history of providing independent technical, test, modelling, simulation and design assurance services across multiple Commercial and Government Departments and was appointed as the Air-to-Ground (A2G) Design Assurance Partner (DAP) in Jul 19 to provide support to the Home Office Emergency Services Network (ESN) team in order to; <ul style="list-style-type: none">(i) improve confidence in A2G decision making; reducing risk to meet the overall programme objectives of delivering a replacement communications system that is as good as, if not better than, the current TETRA system, and;(ii) provide independent design assurance, verification and validation services to provide increased confidence in end-user decision making, leading to an approval to proceed at the required governance milestones. <p>This variation 1 is to extend the Term by 12 months, from 1 April 2025 to 31 March 2026.</p> Objectives Consequently, a dynamic partnered arrangement has been in place since March 2020 which in turn has delivered greater clarity on role ownership with Roke committed to the technical ownership and delivery of A2G RF Design Assurance activities under the following work package themes: <ul style="list-style-type: none">• WP1 – Design Assurance Testing<ul style="list-style-type: none">○ WP1.1 - Fixed wing testing○ WP1.2 – Rotary wing testing○ WP1.3 – Drone testing○ WP1.4 - Data analysis and Reporting○ WP1.5 - Modelling and Simulation• WP2 – Leadership and Programme Management WP 1 - Design Assurance Testing Design assurance testing is intended to gather 'real world' data from the dedicated test network in addition to other sites of interest employing increasingly representative solutions to align with the Authority's overall test strategy. The activities to be performed under this work stream will include but not be limited to the following: <ul style="list-style-type: none">○ Manage and direct the execution of test activity via the Joint Test Team (JTT) and in response to direct tasking issued via Test Team Task Request Proformas including the provision of all Test Readiness Reviews (TRR) and Test Completion Reviews (TCRs) in conjunction with all key stakeholders.○ Preparation and development of all ground and flight test plans / trials instructions / test		

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scripts for each test phase to include the following activities:

- Fixed Vehicle Device:
 - Conduct a functional assessment of an aircraft-installed Fixed Vehicle Device (i.e. mode of operation, call/signal quality, range check etc.) in each of the Band 3, Band 20 and Band 40 environments.
 - Conduct a functional and performance assessment in both a static location / eNB (TBC) and dynamically when installed in an airborne fixed-wing environment using a combination of Fixed Vehicle Device, mast-based antennas and/or representative handsets to assess functionality (i.e. mode of operation, call/signal quality, range check etc.) in each of the Band 3, Band 20 and Band 40 environments.
 - Further aspects of this test campaign are to be defined throughout the duration of the contract and hence a level of flexibility and responsiveness to the planning of this phase is expected as part of the generation of future Test Plans. As a minimum, the following activities are assumed:
 - Batch / device characterisation of FVDs is required to gain a fuller understanding of unit behaviour, particularly maximum power output. This testing is required to understand absolute performance and range across several devices. The sample size remains TBC.
 - Implementation of Chelton production Antenna Model B into the test campaign as further system integration / de-risking activity. This is anticipated to include the integration of the following into a combination of both ground and air-based environments:
 - B Model Band 40 antenna
 - B Model Band 3 / 20 antenna
 - Conduct the required test and measurement activity in accordance with each of the Authority approved test plans and tasking forms in order to achieve each of the high-level objectives outlined above.
 - Procure, contract manage and direct the activities and outputs of the nominated Flight Test Partner (FTP) or other key suppliers as necessary to deliver the required flight test outcomes for the duration of the contract period.
 - Manage and assure the security and integrity of measured / captured test data for dissemination to the Authority and to inform future analysis and modelling activity to be undertaken against individual work packages.