



710934450

**IMAGE INTENSIFIER TUBES (IITS) FOR PUMA HC MK2**

**Multi Helicopter Platforms (MHP) Delivery Team (DT)**

**Statement of Requirement (SoR)**

Issue: 2.0

Date: 03 May 2024

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**RECORD OF AMENDMENTS:**

| <u>Number</u> | <u>Date</u> | <u>Reason for Change</u>  | <u>Amended by</u> |
|---------------|-------------|---|-------------------|
| 1             | 03/05/24    | Update to Annex A SoR requirements at items 2 & 3 at Contract Award following ITN conclusion. | E. Bulmer         |
|               |             |   |                   |
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## 1. Introduction

- 1.1 Multi-Helicopter Platform Delivery Team (MHP DT) ('the Authority') requires the Contractor to provide 60 (sixty) Photonis 4G+ White Phosphor (WP) Image Intensifier Tubes (IITs), Part No XW3240AE.
- 1.2 The System Requirements are covered at ANNEX A – Puma 4G+ White Phosphor Image Intensifier Tubes System **Requirements**.
- 1.3 The contractor shall provide/deliver the required goods/services to the site listed at *Table 1* below.

| Site Name  | Site Representative if not Project Lead | Address |
|------------|---|---------|
| RAF Benson |   |         |

Table 1 – Recipient for deliverables

- 1.4 The duration of this Contract shall be for the duration of manufacture and delivery of the Photonis 4G+ WP IITs.

| Contract Delivery | YEAR |
|-------------------|------|
| All equipment     | 2024 |

## **2. Core Service**

- 2.1 Provision of total quantity 60 (sixty) Photonis 4G+ White Phosphor Image Intensifier Tubes, Part No XW3240AE.
- 2.2 The contractor shall demonstrate the system can achieve compliance against the following standards:
  - 2.2.1 Def-Stan 00-035 Environmental Handbook for Defence Materiel. Issue 6 Dated 28 Feb 2023, Part 5 Mechanical Environments, Section 8 – Deployment on Rotary Wing Aircraft, or equivalent standard.
  - 2.2.2 Def-Stan 00-051 Environmental Management Requirements for Defence Systems. Issue 2 Dated 28 Nov 2021.
  - 2.2.3 Def-Stan 00-056 Safety Management Requirements for Defence Systems. Issue 8 Dated 6 Mar 2023.
  - 2.2.4 Def-Stan 05-135 Avoidance of Counterfeit Materiel. Issue 2 Dated 14 July 2019.
  - 2.2.5 AQAP 2110 Edition D Version 1 NATO Quality Assurance Requirements for Design, Development and Production.
  - 2.2.6 DEFCON 627 Requirements for Certificate of Conformity.
  - 2.2.7 DEFSTAN 05-061 Part 1 Issue 7, Quality Assurance Procedure Requirements – Concessions
  - 2.2.8 RA4814 Occurrence Reporting MRP 145.A.60
  - 2.2.9 RA4815 Maintenance Procedures and Safety and Quality Policy MRP 145.A.65
- 2.3 The System shall have a Certificate of Conformity in accordance with DEFCON 627.
- 2.4 The System shall be compatible with stated Night Vision Goggle frames.
- 2.5 The System shall have a minimum Figure of Merit (FOM) of 2200.
- 2.6 The System shall be White Phosphor.
- 2.7 The System shall have a max Halo of 0.95 mm.
- 2.8 The System shall be capable of autogate response of 0.2 seconds to minimise blooming.
- 2.9 The System shall operate within environmental limits of minus 10°C to plus 40°C.
- 2.10 Documentation including: Publications provided with the system; functional testing to be carried out by user; scheduled maintenance requirements; maintenance and repair arrangements, including applicable warranty.
- 2.11 The System shall be able to be Codified by the authority in accordance with DEFCON 117.

### **3. Technical Documentation**

3.1. The contractor shall provide the following technical documentation:

3.1.1. Publications provided with the system, single copy.

3.2. A Certificate of Design for each delivered Image Intensifier Tube which certifies that the system meets the requirements detailed within this SoR, along with any Limitations or Exceptions.

# **ANNEX A – Puma 4G+ White Phosphor Image Intensifier Tubes System Requirements**

| <b>ID</b> | <b>System Requirement</b>  | <b>Priority</b> | <b>Threshold Measure of Effectiveness (MoE)</b>  | <b>Objective MoE</b> | <b>Remarks</b> |
|-----------|--|-----------------|--|----------------------|----------------|
| IIT_SR_1  | The System shall be provisioned in the stated numbers.   | Key             | Total quantity 60 (sixty) 4G+ White Phosphor Image Intensifier Tubes, Part No XW3240AE.  | As Threshold.        |                |
| IIT_SR_2  | The system shall be compliant against the stated standards, or Alternative Means of Compliance provided. | 1               | <p>- Def-Stan 00-035 Environmental Handbook for Defence Materiel. Issue 6 Dated 28 Feb 2023, Part 5 Mechanical Environments, Section 8 – Deployment on Rotary Wing Aircraft, or equivalent standard.</p> <p>- Def-Stan 00-051 Environmental Management Requirements for Defence Systems. Issue 2 Dated 28 Nov 2021.</p> <p>- Def-Stan 00-056 Safety Management Requirements for Defence Systems. Issue 8 Dated 6 Mar 2023</p> <p>- Def-Stan 05-135 Avoidance of Counterfeit Materiel. Issue 2 Dated 14 July 2019</p> | As Threshold.        |                |
| IIT_SR_3  | The System shall have a Certificate of Conformity in accordance with DEFCON 627.                         | 1               | As Requirement.  | As Threshold.        |                |
| IIT_SR_4  | The System shall be compatible with stated Night Vision Goggle frames.                                   | Key             | Fenn NG700+.   | As Threshold.        |                |
| IIT_SR_5  | The System shall have the minimum stated Figure of Merit (FOM).  | Key             | 2200.  | As Threshold.        |                |

|           |  |     |  |               |  |
|-----------|--|-----|--|---------------|--|
| IIT_SR_6  | The System shall be White Phosphor.  | Key | As requirement.  | As Threshold. |  |
| IIT_SR_7  | The System shall have the stated max Halo.   | 1   | 0.95 mm  | As Threshold. |  |
| IIT_SR_8  | The System shall be capable of stated autogate response.   | 1   | 0.2 seconds  | As Threshold. |  |
| IIT_SR_9  | The System shall be capable of operation in the Air System temperature operating environment for the Aviation Support. | 1   | Minus 10°C to plus 40°C.   | As Threshold. |  |
| IIT_SR_10 | The System shall be provided with stated documentation.  | 2   | Minimum of: <ul style="list-style-type: none"> <li>- Publications provided with the system.</li> <li>- Any Functional testing to be carried out by user;</li> <li>- Any Scheduled maintenance requirements;</li> <li>- Any Maintenance and repair arrangements including applicable warranty.</li> </ul> | As Threshold. |  |
| IIT_SR_11 | The System shall be able to be Codified by the authority.  | 1   | Provision of source data to enable codification, for example product data sheets including Part Numbers.   | As Threshold. |  |