

# **MAINTAINING OPERATIONAL STATUS OF SLOVENIAN ARMED FORCES TURBOLET L-410UVP-E**

**Contract for Goods and Services**

**SCOPE OF WORK**



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## **1 SCOPE OF THE WORK**

### **1.1 BACKGROUND**

1. The Slovenian Armed Forces (SAF) has in its inventory Turbolet L-410 UVP-E aircraft serial number (S/N 912606) registration L4-01 with GE Aviation M601E engines and AVIA V-510 propellers. Slovenian MOD requires contract for services and procurement of parts to maintain operational status of aircraft.
2. An aircraft operates under military regulations and is registered in Slovenian Aircraft Military Register. Aircraft is maintained i.a.w. Slovenian Military Airworthiness Authority (SMAA) regulations and SAF Maintenance Program.
3. This document describes airworthiness, quality, technical and logistic requirements that the Contractor shall fulfil in this Contract.

### **1.2 CONSTRAINTS**

4. Maintenance facility where the scheduled maintenance will be performed shall be located in the geographical area of Europe (including UK).
5. Due to nature of the requested services it is required that Contractor has capabilities and holds approvals for maintenance of aviation products as described in paragraph 2.2 of this SOW.
6. In case that Contractor is not maintenance organisation, it is required that its Subcontractor has capabilities and holds approvals for maintenance of aviation products as described in paragraph 2.2 of this SOW for main Contractor.
7. Maintenance management of the Slovenian L-410 UVP-E is performed according to the SMAA approved Maintenance Program.

## **2 AIRWORTHINES REQUIREMENTS**

### **2.1 GENERAL**

8. SMAA accepts instructions issued by the Original Equipment Manufacturer (OEM), Type Certificate (TC) Holder and rules issued by civilian aviation agencies (CAA), European Union Aviation Safety Agency (EASA) and Federal Aviation Administration (FAA) for initial, continued and continuing airworthiness.
9. Prior to issuing the SMAA certificate for maintenance organization, SMAA may carry out on site audit of the maintenance organisation (Contractor selected bidder). The Contractor shall provide access to maintenance facilities and any documentation SMAA will require. SMAA will submit a request for an audit at least seven (7) days before start of the audit.
10. The Contractor shall hold valid all required Approvals and Certificates as specified in this SOW for the duration of this Contract.
11. The Contractor shall notify the Contracting Authority and SMAA of any changes in the Approvals and Certificates not later than three (3) days after the Contractor was informed of the change.
12. The Contractor shall ensure that any Subcontractor, or any maintenance organisation providing the services under this Contract on behalf of the Contractor shall hold the same level of airworthiness requirements as the main Contractor (Appendix I).
13. In case of occurrences related to technical conditions, maintenance and repair the Contractor shall ensure occurrence reporting in accordance with Operational Technical Directive OTZ 001-24 The Reporting of Technical Occurrences, Accidents and Incidents Involving Military Aircraft.
14. The Contractor undertakes to immediately report any extraordinary event (incident or accident) related to the SAF registered aircraft in accordance with Operational Technical Directive OTZ 001-24 The Reporting of Technical Occurrences, Accidents and Incidents Involving Military Aircraft.

### **2.2 MAINTENANCE**

15. Maintenance shall be performed by the organisation that hold Maintenance Organisation Approval (MOA) Certificate for maintenance of L-410 UVP-E aircraft issued by SMAA. The

SMAA MOA Certificate will not be required if the maintenance organisation is a part of OEM organisation (i.e. organisation that holds Type Certificate for relevant product)<sup>1</sup>.

16. Where a maintenance organisation is an OEM, it shall submit the EASA Part 145 Approval Certificate issued by its respective national CAA.
17. In case that maintenance organisation does not hold the valid SMAA MOA Certificate, it shall obtain this certificate. In that case, the Bid shall include all documentation required by SMAA for issue of the MOA Certificate.
18. For issue of the SMAA MOA Certificate, SMAA requires the following:
  - EASA Part 145 Approval Certificate issued by the national CAA proving that the maintenance organisation is an approved maintenance organisation for requested work (see Appendix I).
  - Approval issued by a TC Holder for the aircraft, engine or equipment that the maintenance organisation is an authorized service centre – where such an approval is issued for the subject of maintenance in question (see Appendix I).
  - Proof that maintenance organization has sufficient experience with the maintaining L-410 UVP-E aircraft. Under sufficient experience, it is understood that the maintenance organization has successfully performed at least two (2) P2 Check - 300HRS/300LDG/1Y inspection in the last year and one P3 Check - 1200HRS/300LDG/1Y inspection in the last two (2) years.
19. The Contractor shall be responsible for tracking aircraft, engine or component configuration and status to include incorporation/accomplishment of all technical directives, modifications and inspections. Technical Directives (TDs) consist of SMAA and OEM commercial maintenance inspections and modifications to include changes, interim changes, modifications, special instructions for safety of flight, grounding of aircraft, Airworthiness Directives (AD's), Contractor generated directives, OEM Service Bulletins (SB), service instructions, letters, and/or notices.
20. Component maintenance, repair or overhaul can be performed only by maintenance organizations that have subject component listed in their current Maintenance Organisation Exposition (MOE) Capability List.

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<sup>1</sup> In case that Contractor will subcontract engine maintenance, the Subcontractor shall hold valid SMAA MOA Certificate for GE Aviation M601E maintenance unless it is OEM or TC holder.

21. New components should be traceable to the Original Equipment Manufacturer (OEM) as specified in the TC holders Parts Catalogue and be in a satisfactory condition for fitment.
22. All delivered new parts / components shall be accompanied with required documents and release certificate EASA Form 1. In case of military equipment the Certificate of Conformity (CoC) from the manufacturer is acceptable.
23. All inspected/tested, repaired, overhauled, modified or replaced components / parts shall be returned with EASA Form 1 or equivalent Certificate of Conformity (CoC).
24. A valid CoC for components / parts shall include:
  - Organisation full name and address
  - Part number
  - Serial number (if applicable)
  - Release statement, that parts / component has been produced, maintained in accordance with applicable standards and contracts
  - Reference number
  - Signature and stamp
25. Material including Raw material and Consumables (liquids, compounds, oil, and grease) shall be accompanied with the Certificate of Conformity (CoC). CoC shall include evidence of conformity traceable to the applicable specifications, including life limitation and material specification data sheet (MSDS) when applicable.
26. A valid CoC for raw material shall include:
  - Reference to the particular Part referenced in parts catalogue (IPC) as standard or
  - Evidence of conformity traceable to the applicable Establish Specifications or Standards\*
  - Manufacturing source / Supplier Source
  - Manufacturing Batch or Lot Number (if applicable)

\* Establish Standards as National Aerospace Standard (NAS), Army-Navy Aeronautical Standard (AN), Society of Automotive Engineers (SAE), American national Standard Institute (ANSI), EN Specifications, Joint Electron Device Engineering Council, etc.
27. SAF accepts only OEM parts to be installed on aircraft and its components. SAF do not accept parts certified under US FAA Parts Manufacturing Approval (PMA) holder.
28. Unless otherwise stated work under this Contract shall comply with the provisions of Commission Regulation (EU) No. 1321/2014 dated 26 November 2014 and its

corresponding amendments on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks with amendments thereto (hereinafter: Regulation). During the term of the Contract, the Contractor shall comply with the provisions of the Regulation and hold all valid permits prescribed by the Regulation.

### **3 QUALITY REQUIREMENTS**

29. The Contractor shall be responsible for performing Quality Control (QC) for the work performed on the aircraft, engine and components under this contract.
30. SAF may supervise the work of the Contractor, or the service provider performing the services subject hereto on behalf thereof, and may conduct quality control in all stages of the implementation of an order. For this purpose, the Contractor shall facilitate the SAF entry into and access to the required facilities, and ensure that supervision may be conducted.
31. The Contractor shall ensure that the SAF (SMAA) team has suitable working office within facility where supervision or audit will take place with internet connection and outside telephone line.
32. Maintenance, repair or overhaul shall be performed in accordance with the applicable aeronautical standards, manufacturer's technical documentation, and the SAF requirements. The same shall apply to services, goods, tools and technical documentation.
33. The Contractor, or the maintenance organisation performing the service, undertakes that the OEM's spare parts shall be installed and the OEM's norms shall be applied. Where an OEM spare part is no longer available on the market, the service provider can install an appropriate equivalent material upon prior written authorization from the SAF.
34. The Contractor shall ensure that all interventions shall be carried out by duly qualified and authorized persons.
35. Any intervention carried out on an aircraft, engine and its equipment shall be recorded in the technical documentation of the aircraft/engine/equipment by the authorized service provider in accordance with applicable aeronautical standards and the instructions given by the Contracting Authority. Entries in the technical documentation shall be written in English by inerasable ink.
36. SAF will accept components, parts, material and consumables from the Contractor under following acceptance criteria:
  - No external damage to the package.
  - Appropriate package protection (point 71 and 73).
  - General condition (dust, plugs, caps appropriately installed to prevent damage or



contamination).

- Conformity to Purchase Order specification, quantity and quality.
- Proper and valid accompanying documentation (e.g. Log Cards, History record) and Certificates (points 22, 23 and 25).
- Appropriate information in Block remarks (Modification, AD status, next inspection, life limitation).

### **3.1 COMPONENT AND TOOLS INSPECTIONS AND TEST**

37. The Contractor shall perform incoming inspection of the component/tool in order to analyse component/tool status and identify discrepancies. The incoming inspection report shall be sent to SAF and shall include, but it is not limited to:
- Component/tool information (part number, serial number, component hours, etc.)
  - Technical documentation reference
  - Results of the incoming inspection
  - Identification of the additional work (Repair Order Sheet - ROS procedure shall apply)
38. If engine/component/tool requires bench test or any other test to be performed after repair or overhaul, the Contractor shall send test report to SAF at least 7 days before the item is installed in aircraft or shipped back to SAF.

### **3.2 AIRCRAFT INSPECTIONS AND TEST**

39. Joint Inventory Assessment shall be performed by SAF together with the Contractor at Contractor's facility at the time of aircraft hand-over to the Contractor. The Contractor shall provide aircraft inventory list signed by authorized personnel. Inventory list shall include, but is not limited to:
- aircraft configuration;
  - list of all tools and loose equipment that arrived with the aircraft;
  - list of all aircraft documentation;
  - known defects;
  - aircraft hours and landings at the time of the delivery;
  - Contractor and SAF representative signature.
40. If the Contractor will request aircraft test flight prior to aircraft hand-over, the test will be done by SAF crew. Contractor's technical personnel may be present in the aircraft during this flight.

41. SAF can, with prior announcement of five (5) working days, conduct the Contracting Authority or government inspection of the aircraft during inspection, repair or overhaul at Contractor's facilities. The Contractor shall support these inspections with its technical personnel, and provide all necessary data related to the maintenance progress. The Contractor shall grant SAF team access to the facility where the maintenance of the aircraft is taking place.
42. The Contractor's pilots and maintenance personnel shall be responsible for performing ground and flight test after the maintenance, upgrade or modification. The Contractor's pilots shall be validated by SMAA before the start of the flight test. However, SAF crew can perform ground and flight test, if there will be mutually agreement between the Contractor and SAF.
43. Aircraft acceptance ground and test flight shall be performed by Contractors' pilots acting as pilot in command and SAF pilot and / or technical personnel. The Contractors' test pilots must be validated by SMAA. However, SAF crew can perform acceptance ground and flight test, if there will be mutually agreement between the Contractor and SAF.
44. On order to renew airworthiness of the aircraft the Contractor shall perform avionics test, ground test and flight tests according to L-410 UVP-E Maintenance Program procedures and SAF additional requirements.
45. After ground test that are performed by the Contractor and prior to flight test, the Contractor shall allow SIAAMAI representative to perform data transfer and test of CVR and FDR system. The Contractor shall assist SIAAMAI representative with required ground support equipment, avionics test equipment and technical personnel (maintenance technician, avionics specialist).
46. The SIAAMAI can authorize Contractor to perform data transfer and test of CVFDR system.
47. Aircraft acceptance inspection will be done by SAF. The Contractor shall support acceptance inspection with following personnel, but not limited to: pilot, maintenance engineer and program manager.

## **4 TECHNICAL REQUIREMENTS**

### **4.1 MAINTENANCE**

48. Aircraft, engine and its components shall be serviced, maintained, repaired and overhauled in compliance with:
- the TC holder/OEM maintenance system, including the TC holder/OEM technical documentation;
  - the instructions on service, maintenance, repair and overhaul issued by the respective manufacturers of other components;
  - valid Aircraft Maintenance Programme as approved by SMAA;
  - scheduled aircraft maintenance checks and acquisition of required spare parts;
  - TC holder/OEM technical directives (Service Bulletin) and airworthiness directives issued by the competent aviation authorities (EASA and SMAA).
49. Aircraft inspections shall be performed in accordance with the L-410 UVP-E Maintenance Program and applicable AMM.
50. The Contractor shall perform engine and propeller inspection as part of the aircraft inspections. The Contractor can subcontract engine inspection, repair or overhaul activities to another maintenance organization. In this case, the Contractor shall be responsible that sub-contractor holds the same airworthiness requirements as described in the paragraph 2.2 and Appendix I of this SOW.
51. The Contractor shall perform component inspection as part of the aircraft inspections. The Contractor can subcontract component inspection, repair or overhaul activities to another maintenance organization. In this case, the Contractor shall be responsible that sub-contractor holds the same airworthiness requirements as described in the paragraph 2.2 and Appendix I of this SOW.
52. Annual Avionics Check, Aircraft Weighing, Ground Run and Test Flight shall be performed in accordance with the SAF approved L-410 UVP-E Maintenance Program.
53. Unless otherwise specified aircraft or components shall be returned to SAF in the same configuration as received, with the same type components, accessories, and special equipment installed except as maintained, repaired, removed, or added by the requirements of each case.
54. The Contractor shall furnish and maintain all parts and components. All ordered parts or

components that needs to be delivered or replaced shall be NEW with zero (0) hours. If part or component has calendar limit, minimum three quarters (3/4) of the total calendar limit has to be available upon delivery or installation on the aircraft or component. However, the Contractor might quote for used parts in case of none availability of new parts. Delivery or replacement of the parts or components shall be done only after SAF approval.

55. The Contractor shall be responsible for all the spares, materials, and petroleum oil & lubricants required for the inspections, repair or overhaul as indicated in the relevant technical documentation.
56. The Contractor shall furnish and maintain all tools and equipment. Tools and test equipment shall be calibrated i.a.w. applicable OEM procedures. Further, configuration of test equipment shall be performed i.a.w. the latest OEM technical documentation and shall be consistent with the configuration of the item being tested. Evidence of certification shall be made available to SAF and SMAA upon request.
57. Lubricants, fluids and liquids to be filled up in aircraft shall be in accordance with OEM approved lubricants, fluids and liquids. If SAF requirements are specified the Contractor shall use lubricants, fluids and liquids as required.

#### **4.2 REPLACEMENT OF TIME LIMITED PARTS**

58. During maintenance or repair process the Contractor shall perform the analysis of the installed OTL, SLL, LL parts in order to ensure that these items have a minimum remaining life of at least 1 year or 300 hours of its remaining life cycle after delivery to the SAF. If Contractor determines that item has remaining time less then requested life cycle and it is not requested for replacement in the Request for Quotation (RFQ), then the Contractor shall report this to the SAF.
59. During overhaul process the Contractor shall perform the analysis of the installed OTL, SLL, LL parts in order to ensure that these items have a minimum remaining life of at least TBO (Time Between Overhaul) interval after delivery to the SAF. If Contractor determines that item has remaining time less than one TBO and it is not requested for replacement in the SAF RFQ, then Contractor shall report this to SAF.
60. Replacement of time limited parts that are not defined as standard replacement parts in the scope of requested work shall be treated as over and above work via ROS procedure.

#### **4.3 SERVICE BULLETIN APPLICATION**

- 61. The Contractor shall perform requested SB as part of the maintenance, repair or overhaul.
- 62. OEM applicable mandatory or alert SB and SMAA technical directives shall be performed during aircraft or component maintenance, repair or overhaul. In case mandatory or alert SB where not request to be implemented by SAF it is Contractors responsibility to notify SAF if such SB were issued by OEM. Non-Mandatory OEM SBs shall be implemented as required/requested by SAF.
- 63. The Contractor shall provide the material required to implement the approved SBs.

#### **4.4 OVER AND ABOVE WORK**

- 64. SBs that are not in the initial RFQ shall be treated as over and above work via ROS procedure (see maintenance **Contract, Article 6**).
- 65. Any additional work identified after aircraft, engine or component hand-over to the Contractor and not covered by RFQ shall be treated as over and above work via ROS procedure (see maintenance **Contract, Article 6**).
- 66. The ROS procedure identifies all findings, parts, man hours, influence of TAT and costs related to an identified finding. The Contractor is responsible to fill out ROS document with all relevant data. Contracting Authority has the right to reject ROS in case relevant data is missing in the document.
- 67. Over and above quotation via ROS shall include (as a minimum) ROS number, discrepancy description, reference to technical documentation, cost breakdown of the spares required and labour. Furthermore, any impact on the overall TAT shall be indicated. In a case of high price material or extensive labour costs the Contractor shall provide together with ROS also pictures of the discrepancy.
- 68. No work on the specific equipment shall be done until ROS is approved by SAF.

#### **5 TRANSPORTATION, PACKAGING AND STORAGE**

- 69. Overflight of the aircraft to and from the Contractor's facility will be responsibility of the SAF.

70. Transportation of the components, other goods and technical documentation to and from the Contractor's facility will be responsibility of the Contractor as specified in the **Contract Article 4**.
71. Packaging shall be in accordance with OEM packaging requirements or guidelines. If OEM did not define packaging requirements than the material and components shall be packed in order to ensure full protection against mechanical, chemical and other damage during the transport
72. Aircraft, engine and component storage shall be in accordance with OEM documentation.
73. Packaging shall ensure that goods are protected from mechanical, chemical and other damage during transport. Individual sets of goods must be packaged uniformly (all components and the corresponding documentation per set). The Contracting Authority shall be entitled to refuse to accept goods due to unsuitable packaging.

## **LIST OF ABBREVIATIONS**

AAIIB	Aircraft Accident and Incident Investigation Board
AMM	Aircraft Maintenance Manual
AD	Airworthiness Directive
APU	Auxiliary Power Unit
COC	Certificate of Conformity
CVR	Cockpit Voice Recorder
DBU	Data Base Unit
DOA	Design Organisation Approval
EASA	European Union Aviation Safety Agency
EMM	Engine Maintenance Manual
EU	European Union
FAA	Federal Aviation Administration
FDR	Flight Data Recorder
FH	Flight hours
LL	Life Limited
M	Months
MOA	Maintenance Organisation Approval
OEM	Original Equipment Manufacturer
OTL	Operational Time Limited
PMA	Parts Manufacturing Approval
QC	Quality Control
RFQ	Request for Quotation
ROS	Repair Order Sheet
SAF	Slovenian Armed Forces
SB	Service Bulletins
SLL	Service Life Limited
SMAA	Slovenian Military Aviation authority
SMOD	Slovenian Ministry of Defence
SOW	Scope of Work
STC	Supplemental Type Certificate
TAT	Turnaround Time
TBO	Time Between Overhaul
TC	Type Certificate
TD	Technical Directive

TI	Technical Information
UK	United Kingdom



## **APPENDIX I – L-410 UVP-E AIRWORTHINESS REQUIREMENTS**

### **AIRCRAFT L-410 UVP-E**

The Contractor shall hold a valid EASA PART-145 approval for L-410 UVP-E aircraft line and base maintenance.

The Contractor shall hold an OEM valid authorized repair centre approval for L-410 UVP-E aircraft base maintenance.

### **ENGINE GE Aviation M601E**

The Contractor or Subcontractor shall hold a valid EASA PART-145 approval for GE Aviation M601E engine maintenance.

The Contractor or Subcontractor shall hold an OEM valid authorized repair centre approval for GE Aviation M601E engine maintenance.

### **PROPELLER AVIA V-510**

The Contractor or Subcontractor shall hold a valid EASA PART-145 approval for AVIA V-510 propeller maintenance.

The Contractor or Subcontractor shall hold an OEM valid authorized repair centre approval for AVIA V-510 propeller maintenance.

### **COMPONENTS**

The Contractor or Subcontractor shall hold a valid EASA PART-145 approval for components maintenance, repair and / or overhaul.

The Contractor or Subcontractor shall hold an OEM valid authorized overhaul centre approval for components overhaul.

## **APPENDIX II – L-410 UVP-E MAINTENANCE**

### **SCHEDULED MAINTENANCE**

I. Schedule Maintenance is performed according L-410 UVP-E technical documentation:

- L-410 UVP-E AMM last revision & appendix;
- MS - Maintenance Schedule for L-410 UVP-E Without Overhaul, Do-L-410-1222.1;
- EMM – Engine Maintenance Manual for M 601E, Book No.:0982055;
- POM – Propeller Operation and installation Manual V 510, Doc.No.: E-1500.

II. Planed scheduled maintenance in contraction period for SAF L-410 UVP-E:

**2024:**

- P3 Check - 1200HRS/300LDG/1Y Inspection;
- Propellers Overhaul

**2025:**

- P2 Check - 300HRS/300LDG/1Y Inspection;
- Engines Overhaul

**2026:**

- P2 Check - 300HRS/300LDG/1Y Inspection
- Inspection - Aging Aircraft Program;

**2027:**

- P2 Check - 300HRS/300LDG/1Y Inspection;

**2028:**

- P3 Check - 1200HRS/300LDG/1Y Inspection.

### **UNSCHEDULED MAINTENANCE**

Unscheduled Maintenance shall cover:

- On-call AOG Team services in the field;
- Troubleshooting, maintenance rectification, major component repairs, structural repairs, modifications;
- Service Bulletins implementation;
- AD issued by Civilian and / or Military Aviation Authorities;
- Other work according to SAF needs and priorities.

