



Air Traffic Management (ATM) Services

Statement of Work (SOW)

for

KANDAHAR AIRFIELD (KAF)

Afghanistan



AMENDMENT RECORD

REVISION/AMENDMENT	PAGES(S)	DATE OF ISSUE	REMARKS
1.0 version	22	08 Apr 2009	Release for Request for Proposal (RFP)
2.0 version	22	29 May 2009	

TABLE OF CONTENTS

TABLE OF CONTENTS & REFERENCES	2
1. SCOPE	3
2. BACKGROUND INFORMATION	3
3. APPLICABILITY	4
4. PLACE OF PERFORMANCE	4
5. APPLICABLE DOCUMENTS	4
6. AUTHORITY	5
7. EQUIPMENT	5
8. DESCRIPTION OF SERVICES	6
9. PERSONNEL REQUIREMENTS	10
10. TRAINING REQUIREMENTS	12
11. REAL LIFE SUPPORT REQUIREMENTS	13
12. SUPPLY REQUIREMENTS	13
13. CIS REQUIREMENTS	14
14. TRANSPORTATION REQUIREMENTS	15
15. RECORDING AND REPORTING	15
16. QUALITY ASSURANCE	16
17. SAFETY MANAGEMENT SYSTEM	16
18. DEFINITION OF TERMS AND ACRONYMS	17

References:

- A. Instructions for NAMSA Contractors on Deployed Operations – Dated February 2009.
- B. Republic of Afghanistan Aeronautical Information Publication (AIP) – latest edition.
- C. Annex 1 For the Provision of Airfield Infrastructure Services SOW
- D. Annex 2 Airfield Equipment and Vehicle Maintenance to Airfield Support Services SOW
- E. ACE Directive 60-80 Property Accounting and Control

1. **SCOPE**

1.1. This Statement of Work (SOW) defines the services to be provided by the Contractor in carrying out the functions of providing Air Traffic Management (ATM) Services at Kandahar Airfield (KAF). The core services include, but are not limited to:

- 1.1.1. Provision of Air Traffic Control Tower Services;
- 1.1.2. Provision of Air Traffic Control Approach Services;
- 1.1.3. Provisions of Airfield Management Services;
- 1.1.4. Provision of Air Traffic Management Equipment Maintenance Services.

1.2. The services defined by this Statement of Work are essential to the successful operation of the airfield and are required in order to provide a safe environment for aircraft arriving and departing (including ground operations) in and around KAF and the controlled airspace.

1.3. A document which provides general guidance for Contractors will be provided. This has been developed by NAMSA and is entitled 'Instructions for Contractors Deployed on Operations' (Reference A). This details matters to which all Contractors shall comply.

2. **BACKGROUND INFORMATION**

The current configuration of KAF will change considerably over the coming years. To set the context of this SOW, the following information is provided:

2.1. KAF is a military airport which accepts civilian traffic and although not operating to maximum capacity it can reasonably be expected that traffic will increase over time. Currently, there are approximately 460-560 Air Traffic movements daily (the average for 2008 was 513 per day with a maximum in July 2008 of 562 movements per day) and is expected to increase to 600-700 daily movements prior to contract start.

2.2. KAF supports primarily military air operations in Afghanistan. These air operations include:

- Armed and unarmed Fixed Wing (FW) fighter aircraft.
- Transport aircraft.
- Armed and unarmed Unmanned Aerial Vehicles.
- Armed and unarmed Rotary Wing (RW) aircraft.

2.3. Large civilian and contract cargo aircraft are also present at KAF.

2.4. KAF is currently operated to the equivalent of an ICAO Category 9 airfield, with the ability to surge to Category 10 when required.

2.5. The pace and volume of air operations increases each year during the Hajj Muslim Pilgrimage. It can be expected that supportive services will be offered to civilian flights transporting pilgrims to and from Mecca.

2.6. ATM Services are to be provided on a 24/7 basis. During periods of intense military operations exceptional levels of ATM Services support will be required to facilitate the operational requirement.

2.7. Air Traffic Control Tower and Approach services are currently conducted from an interim tower and radar operations room under a separate contract. There are two independently managed NATO projects that will provide a fully functional ATC 28 meter

high tower with a 23 meter viewing platform Tower and provision of ATM equipment as described in paragraph 7.1. Within the terms of this SOW, the ATM Equipment will go through separate sub-system Site Acceptances and Full Operational Capability (FOC) Tests by 01 March 2010 with full ATM Services being provided by the Contractor starting NLT 31 March 00:01 hrs LOCAL on 01 April 2010.

3. APPLICABILITY

This Statement of Work is applicable to all ATM Services provided by the Contractor, covering both current and future configurations of KAF.

4. PLACE OF PERFORMANCE

4.1. All services, unless otherwise stipulated and agreed to, shall be performed at KAF in Southern Afghanistan, approximately 16 kilometres (km) South-East (SE) of the city of Kandahar and 60 km North-West (NW) of the Pakistan border. The precise details are:

- 4.1.1. Latitude 31 30.3 North - Longitude 65 50.9 East.
- 4.1.2. Elevation is 3329 feet (1014 metres) above mean sea level.
- 4.1.3. The climatic conditions are hot and dry with temperature cycles between 0 to 49°C and relative humidity between 17 to 73 % (STANAG 2895 deals with environmental/climatic operating conditions).

4.2. There is currently only one runway operating with:

- 4.2.1. An orientation of 05/23;
- 4.2.2. A total length 3202 metres;
- 4.2.3. Operating width of 68 metres;
- 4.2.4. Surface of the runway is concrete and asphalt;
- 4.2.5. A parallel Northern Taxiway that can also be used as an Emergency Landing Strip (ELS) is forecast to be operational by March 2010;
- 4.2.6. Additional ramps are being, and will continue to be constructed.

4.3. Within the context of this SOW, the Control Terminal Area (CTA) of KAF is currently defined as a 50 nautical mile radius centred from the airfield reference point at KAF from surface to FL 290. Other detailed airfield information can be found in Reference B.

4.4. Extremely harsh environmental conditions are prevalent by virtue of temperature, low relative humidity, sand and dust storms, and seasonal flooding.

5. APPLICABLE DOCUMENTS

5.1. NATO STANAGs

5.1.1. STANAG is the NATO abbreviation for a Standardisation Agreement, which establishes common processes, procedures, terms, and conditions for common military or technical procedures or equipment between the member countries of the alliance and which are in common use whilst supporting military operations.

5.1.2. A series of such STANAGs will be in use at KAF and can be found at Annex A. Those STANAGs which impact upon the provision of ATM Services will be made available to Contractors.

5.2. NATO ATM Operating Standards

5.2.1. The NATO Operating Standards for ATM to which Air Traffic Controllers are to operate are primarily based upon International Civil Aviation Organisation (ICAO) Standards and Recommended Practices (SARPs), supplemented with specific military procedures to support military operations. These Operating Standards, described in Annex B, were developed under the auspices of the NATO Air Traffic Management Committee (NATMC), and subject to NATO oversight. These NATO Operating Standards will thus define the minimum acceptable level of performance in the provision of ATM Services at KAF.

5.2.2. These and other regulations (e.g. Aeronautical Information Publication (AIP) - Afghanistan) or those required by NATO Nations were taken into account when defining standards and in the provision of radar and procedural approach, departure, and transit services in addition to precision approaches, and visual and ground control services.

5.3. Compliance

5.3.1. The Contractor shall comply with all relevant STANAGs, ICAO SARPs, NATO ATM Operating standards, other regulations (such as Reference B), and any other NATO or ICAO regulations.

5.3.2. The Contractor shall provide the services in accordance with the standards specified in this SOW.

5.3.3 NATO may assign a Lead Nation to ensure the required oversight of the Contractor's compliance to the standards, regulations, rules and procedures and validate / render ATC licences held by Contractor personnel. During the performance of the contract (including options), there may be changes to the Lead Nation. Such a change may require amendments to the procedures to comply with specific Lead Nation national requirements. The Contractor shall make the necessary amendments required by an incoming Lead Nation. If the amendments required as a result of a Lead Nation change are not minor and incur additional costs, such a change shall be processed in accordance with contract change process.

6. AUTHORITY

6.1. Overall Control Authority of KAF and its operations is delegated to the Military Commander of Kandahar Airfield (COMKAF) who may exercise Tactical Command of airspace for operational considerations.

6.2. The Contractor is responsible to COMKAF, through NAMS and the Military Operational Chain of Command, for all aspects of his operation whilst providing ATM Services at KAF.

6.2.1. NAMS is the Contractual Authority

6.2.2. J3 Director Air Operations (Dir Air OPS) on behalf of Deputy Commander Operations (DCOM OPS) is the operational authority.

6.3. Under the NATO/ISAF mandate, KAF is operated and maintained as a military airfield capable of accepting civil air traffic. Consequently, ISAF/COMKAF acting under this authority is allowed to permit NATO Civilian Air Traffic Control (ATC) contractors to deliver Air Traffic Services (ATS) at KAF provided they hold a valid NATO

members ATC license. However, such licences may be subject to validation / rendering requirements unique to KAF by an appropriate validating authority.

7. EQUIPMENT

7.1. The ATM Equipment which the Contractor will work with, and have responsibilities for (in accordance with this SOW), includes, but is not limited to the following equipment, or equipment similar to:

- Air Traffic Control Tower – Perform user maintenance and report defects/maintenance requirements to the APOD Infrastructure Contractor.
- Precision Approach Radar (PAR): ITT PAR 2000.
- Primary Surveillance Radar (PSR): Thales STAR 2000.
- Secondary Surveillance Radar (SSR) : Thales RSM 970.
- Radio Communication Systems: Park Air.
- ATC Centre Capability – EUROCAT-C.
- VHF Omni-directional Range/Tactical Aircraft Control (VORTAC) :
VOR - Thales 432 , TACAN – AN 453.
- Instrument Landing System (ILS) - Selex Systemi Integati Model 2100.
- Airport Meteorological System: Degreane Horizon SIOMA
- Aeronautical Fixed Telecommunication Network (AFTN).
- Air Terminal Information System (ATIS): TERMA D-ATIS PLUS.
- Direction Finding (DF) – Fernau 2030.
- Crash Phone Network.
- Emergency Light Gun.
- Conditioned Racks and UPS.
- Nautel NDB System, NAT 3902.

7.2. There will be two (2) PAR Consoles, three (3) Approach Consoles and one (1) Approach Console in the observation deck in the Air Traffic Control tower. There are additional containerized consoles and specialized consoles and ancillaries within the Air Traffic Control Tower (air field lighting console).

7.3. The ATM Equipment will be initially subject to a manufacturer's warranty period of one year after Provisional Site Acceptance (PSA), presently scheduled for 01 March 2010 after which the Contractor providing ATM Services will assume full responsibility for the operations and maintenance of the ATM Equipment. The warranty does not replace the requirement for the Contractor to perform preventative maintenance or corrective maintenance for non-warranty covered outages. The Contractor will be required to support warranty repairs through trouble shooting and callout of warranty services. The Contractor is to ensure that its actions do not invalidate the OEM's warranty.

7.4. The electrical power supply within KAF will be available at 230/ 400 Volts, 50 Hz and 120/ 208 Volts, 60 Hz at both sides of the runways. As ATM infrastructure is located on both sides of the runway, different power supply sources will feed different ATM equipment. The Contractor shall be required to have the capability to work with both types of power.

7.5. Power for the ATM Equipment will initially be provided by generators until prime power is connected. The Contractor shall be capable of operating, maintaining, and managing this generator equipment to include coordination with KAF real life support services for such support as POL resupply, etc.

8. DESCRIPTION OF SERVICES

8.1. GENERAL REQUIREMENTS

8.1.1. The Contractor shall provide all resources and management necessary to operate ATM Services at KAF in accordance with specific requirements outlined in the SOW, and Annexes, and as stipulated in the contract terms and conditions.

8.1.2. The Contractor shall operate all systems inclusive of equipment, instruments and interfaces in accordance with manufacturer's specifications and recommendations.

8.1.3. The Contractor shall provide the services described within this SOW on an un-interrupted basis during any transition period from existing versions of equipment / infrastructure to newer versions of equipment / infrastructure.

8.1.4. The Contractor shall be an integral member of the transition team to take the necessary actions required to ensure safe and seamless transition from the existing contractor, infrastructure and equipment to the new facilities. Upon contract completion/termination the Contractor shall support the transition to a new contractor, military or local national personnel, ensuring a safe and seamless turnover of operational responsibility.

8.1.5. The Contractor shall develop and provide a Project Implementation /Transition Management Plan for the provision of services contained in this SOW. The draft plans shall be provided to NAMSA as part of the proposal. Final plans shall be provided 14 days after contract signature.

8.1.6. The Contractor shall be responsible for obtaining any necessary licences, including National ATC licenses, permits, visas etc. required to perform this contract and for complying with any and regulations applicable to the performance of work at KAF.

8.1.7. Flight Checks for FOC of the equipment, will be NATO's responsibility. All subsequent flight checks to maintain equipment certification shall be the Contractor's responsibility. The Contractor shall provide the standards used to establish Flight Check intervals to the host nation for approval. Flight inspections are to be conducted in accordance with Doc 8071 — Manual on Testing of Radio Navigation Aids, Volume I and NATO STANAGs. For pricing purposes, the company should price a minimum of two (2) scheduled flight checks per year and provide a separate priced option for the unscheduled flight checks.

8.1.8. The Contractor shall assume liability for any losses or damage caused by misuse, neglect, bad practice, wilful harm etc. by the Contractor's personnel, for any NATO Furnished Equipment (NFE), that is in-theatre military equipment or other in-place assets/facilities, for which he has day-to-day control and responsibility. The Contractor shall establish a building custodian program to ensure that NATO Furnished facilities are properly maintained and maintenance issues are reported to Facilities Maintenance Contractor as required.

8.1.09. The Contractor shall ensure that all applicable Standards, Regulations, Standard Operating Procedures, Maintenance Manuals and Handbooks, and any other Technical Orders and Publications, are adhered to.

8.1.10. The Contractor shall maintain a current library of all applicable Standards, Regulations, Standard Operating Procedures, Maintenance Manuals and Handbooks, and any other Technical Publications which pertain to this SOW.

8.1.11. The Contractor shall mobilise its staff and infrastructure in a phased manner as described in the Project Implementation Plan. The technical training of the Operators, Controllers and Maintainers will be initially given at the Original Equipment Manufacturer's (OEMs) and/or ATM System Integrator's locations. The fully trained Maintainers shall be required to participate in the Site Acceptance process for the various Sub-systems in October and November 2009. Therefore, Contractor's maintenance staff shall be available for training no later than 01 September 2009.

8.2. ATM OPERATIONS REQUIREMENTS

8.2.1. For the provision of Air Traffic Control Tower Services, the Contractor shall provide the following services for all aircraft within the CTA:

8.2.1.1. Visual control services.

8.2.1.2. Ground control services.

8.2.2. For the provision of Air Traffic Control Approach Services, the Contractor shall provide:

8.2.2.1. Radar and procedural approach services.

8.2.2.2. Radar and procedural departure services.

8.2.2.3. Radar and procedural transit services.

8.2.2.4. Precision approach services.

8.2.3. For the provision of Airfield Management Services, the Contractor shall provide:

8.2.3.1. ATC liaison services to coordinate ATM issues. As such, the Contractor shall:

8.2.3.1.1. Provide guidance, advice, and counsel to military and civil authorities, and as directed by COMKAF in such areas as airfield information and development of Publications and Standard Operating Procedures (SOP).

8.2.3.1.2. Provide as a minimum a liaison and coordinative service through COMKAF for the coordination of air traffic, ground traffic, safety observation and communication with other civil and military organizations (e.g. NATO forces, Host Nation Government Officials, Neighbouring Country Government Officials (on 'Letter of Agreement' issues for example) ICAO, IATA and Airport Officials) and authorities as required.

NATO UNCLASSIFIED

Releasable to NATO/ISAF and Contractors

8.2.3.2. Act as a coordinating and reviewing facility for the promulgation of aircraft Prior Permission Required (PPR). The Contractor shall provide personnel to operate within COMKAF Ops to manage the PPR process including, but not limited to, reply to PPR requests, allocated PPR numbers and, in conjunction with the military staff, apply Maximum On Ground (MOG) capping for the number of ramp slots. Overall PPR planning is a COMKAF responsibility.

8.2.3.3. In conjunction with the PPR process, the Contractor shall conduct planning for ramp space management and conduct the daily execution.

8.2.3.4. Coordinate and work operational requirements with other KAF tenants, contractors or such other military and / or civilian entities as COMKAF may designate.

8.2.3.5. COMKAF will generate and provide Airfield Information, including Notice To Airmen (NOTAM) for KAF and the Contractor shall issue the information on behalf of COMKAF. The Contractor shall ensure the accuracy of the published data.

8.2.3.6. Provide advice and highlight the Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS) and obstacle limitation requirements to COMKAF.

8.2.3.7. Participate in, and provide representation for relevant KAF meetings and briefings as required.

8.2.3.8. Be responsible to provide monthly or as required information to all internal and external agencies of the state and serviceability of ATM equipment, including but not limited to the equipment listed in paragraph 7. The information shall include, but not limited to, equipment status, estimated time to repair of equipment as applicable, and availability of services and airspace within the Contractors area of responsibility.

8.2.3.9. Implement, manage and issue flight-line, restricted area passes, and other passes as required i.a.w COMKAF policy and guidelines.

8.2.4. The Contractor shall provide a continuous monitoring and scheduled inspection service for Airfield Operating Surfaces (AOS) and associated equipment to identify actual or potential hazards to safe airfield operations. The Contractor shall:

8.2.4.1. Coordinate with the contractor providing services defined in the Airfield Infrastructure Services SOW paragraph 4.3.3 to 4.3.5, Reference C, and COMKAF staff which shall ensure insofar as possible the soundness of all surfaces.

8.2.4.2. Provide and maintain vehicles which are suitable for carrying out airfield operating surface inspections. ~~The Contractor is to be aware of the vehicle maintenance services available provided by the Airfield Equipment and Vehicle Maintenance SOW, Reference D, may be available to the Contractor.~~

8.2.4.3. In coordination with COMKAF staff implement and perform an inspection routine which includes at minimum airfield lighting, airfield markings, manoeuvring areas, roads, signs and painting, vegetation height, Foreign Object Debris (FOD), and

aircraft grounding points and ensures that all areas are checked in a weekly programmed and efficient manner with key areas inspected at least once per 24 hour period.

8.2.4.4. Develop an Airfield Inspection Plan outlining the Inspection routine. A Draft shall be provided with the proposal and the Final plan shall be delivered at start of services.

8.3. ATM EQUIPMENT MAINTENANCE REQUIREMENTS

The Contractor shall for the provision of ATM Equipment Maintenance Services:

8.3.1. Manage all equipment covered by this SOW to include documentation, spares, schedules, power, communications equipment and all system interfaces up to the demarcations that will in general be the nearest distribution frame or electrical panel to the ATMS.

8.3.2. Perform all non-warranty provided maintenance to ensure that all equipment meets the Operational Availability as listed in Annex C., Be responsible for preventative and corrective maintenance and certification of all ATM systems inclusive of equipment, instruments and interfaces of the ATM system, as per manufacturer's specifications, excepting the circumstance for battle damage in which case the Contractor's best effort for restoration will be the requirement.

8.3.3. All repairs shall be in accordance with OEM technical orders, recommendations, service support directions and practices.

8.3.4. Maintaining the certification of the equipment by the proper authorities and applicable standards for certification to be provided by the contractor.

8.3.5. Managing the procurement of, the performance of, and the payment for any periodic and recurring flight checks, calibration, and testing of ATM equipment that may be required in accordance with regulations as detailed in paragraph 8.1.8, and manufacturer's specifications that will be provided at Contract start.

8.3.6. Calibrate and maintain all systems inclusive of equipment, instruments, interfaces, test equipment, mock-ups, test jigs, tools, etc. in accordance with manufacturer's specification and schedule.

8.3.7. Follow manufacturers/integrators Scheduled Maintenance Programme as a minimum. The Contractor shall, after approval by NAMSA and COMKAF, modify the Scheduled Maintenance program based upon recorded Mean Time Between Failure (MTBF) trends.

8.3.8. Although NATO will provide the Initial Operating Spares, special to type and general purpose tools and test equipment necessary to support the ATM suite over the initial twelve-month period the contractor shall provide all necessary tools, spares, test equipment and portable lifting equipment. A list of the NATO provided spares and test equipment will be provided at Contract start.

8.3.9. The Contractor shall make warranty calls on behalf of NAMSA and COMKAF. Late or non-responses to warranty calls by OEMs will be passed to NAMSA for action.

8.3.10. The Contractor shall provide a separately priced option to provide the following services:

8.3.10.1. Depot Level capability to repair unserviceable equipment that is beyond the capability of the KAF based Maintenance Staff in the most cost-effective manner. The maximum depot repair turn around time (TAT) will not exceed 10 working days for any unit after the equipment has been received at the Depot. The TAT shall include in-processing, trouble shooting, repair and check-out and release to the Site.

8.3.10.2. Engineering support capability in the most cost-effective manner. The Engineering support shall include, but not limited to, obsolescence management, Help Desk and Post-Production services.

8.3.10.3. Software modifications/upgrade and bug fixes services in the most cost-effective manner. The on site Contractor maintenance staff shall install software updates and new releases when this service is not provided by OEMs.

8.3.11. Maintain comprehensive, preventative, corrective, test and repair records to enable detailed fault analysis and early detection of failures/maintenance trends. Annually, and on demand, the Contractor shall forward the results of these analyses for review by NAMSA.

8.3.12. Retain all documentation for the life of the contract and provide the documentation to NAMSA at the end of the contract.

8.3.13. Maintain and keep current all documentation and technical orders to support the ATMS hardware and software covered by this contract.

8.3.14. The Configuration Change Control Authority for items and equipment of the ATM equipment covered under this contract is NATO.

8.3.15. Maintain configuration management in accordance with STANAG 4159 and specifically the Contractor shall:

8.3.15.1. Ensure all repairable items, spare parts and materials processed or used under this contract conform to the design, drawings and specifications of the Current Approved Configuration Baseline (CACB) of the ATM system that will be provided at Contract start.

8.3.15.2 The NAMSA representative must be notified of emergency actions as soon as possible. Unless specifically approved by NAMSA, the Contractor shall not be authorized to modify any part or component of the equipment.

9. PERSONNEL REQUIREMENTS

9.1. For the provision of ATM services the Contractor shall:

9.1.1. Ensure that all deployed personnel have the requisite level of security clearances and as further detailed in References A. Further, the Contractor shall ensure all relevant personnel hold a NATO SECRET security clearance. With regards to security clearances, the Contractor shall:

9.1.1.1. Be responsible for obtaining all needed security clearances prior to personnel mobilization. The relevant Contractor personnel shall have a minimum of NATO SECRET Personal Security Clearance as issued by his/her National Security Authorities. No clearance or waiver to this requirement shall be granted and no Contractor personnel shall be assigned and deployed to KAF without having the needed clearance in place.

9.1.1.2. Provide advance written proof of the ability to assign fully cleared personnel prior to deployment to KAF. Failure to provide such a clearance for Contractor personnel will result in non-allowance to commence work until that time when they can provide an appropriate security clearance. At no time is NATO to be held responsible for the provision of such a Personnel Security Clearance for Contractor personnel.

9.1.2. Have full responsibility for medical preparation, medical certification, medical treatment and evacuation (including repatriation to home country and corpse transportation) of all (employed, hired, local etc.) employees.

9.1.3. Ensure all personnel meet English language standard levels Standard Language Proficiency (SLP) 4444 in accordance with STANAG 6001.

9.1.4. The project manager and management team shall be:

9.1.4.1. Familiar with current NATO and ICAO terminology.

9.1.4.2. Have proven levels of qualifications and experience in the management of work of similar type and extent.

9.1.4.3. Capable of resolving technical, administrative and any other problems that may arise during the course of the ordinary activities.

9.1.4.4. Qualified to operate vehicles within the aerodrome to satisfy COMKAF safety and other standards to be provided by the Contractor.

9.1.5. Develop and implement a Manning Plan and the draft plan shall be provided to NAMSAs as part of the proposal. Final plans shall be provided 30 days after contract signature. This plan shall include as a minimum:

- Organizational chart.
- Position descriptions.

- Qualification requirements for key positions as well as for positions requiring specific technical skills or professional certification.
- Rotation plan making due allowances for leave, sickness, rotations and training.
- How they will meet surge requirements, to what level of surge, timescales and training to meet the surge requirements.

9.1.6. The Contractor's shall deploy in a phased manner. The Contractor's Maintenance personnel will attend In-Factory training in North America and Europe in the September/October 2009 timeframe. They shall then deploy to KAF to participate in the Site Acceptance Testing for training purposes. The Contractor's Operations staff shall receive In Factory Equipment specific training in the November/December timeframe and will then deploy to KAF to receive site specific training in the January/February timeframe. Annex D provides a summary of the proposed deployment schedule.

9.2. ATM Personnel Specific Requirements

9.2.1. The Contractor shall employ personnel in a sufficient quantity for the provision of ATM services in accordance with ICAO defined ratings.

9.2.2. The Contractor shall employ experienced Air Traffic Controllers who hold a current and valid Air Traffic Controller license from a NATO nation for the services they are employed to provide in accordance with NATO ATM operating standards for KAF as detailed in paragraph 5.2.

9.3. ATM Maintenance Personnel Specific Requirements

9.3.1. The Contractor shall employ maintenance personnel who have received formal training in basic electronics and telecommunications, radar, computer architecture and peripherals and/or electronics maintenance training.

9.3.2. The Contractor personnel shall possess a minimum of three years experience on military or civilian Navigational Aids, Radar, Telephone systems, Computer systems, Communications equipment, Meteorological systems and other systems necessary for the provision of ATM services.

9.3.3. The Contractor shall provide sufficient numbers of personnel who have thorough knowledge on the use of Linux, computer architecture and peripherals to maintain the EUROCAT-C system.

9.3.4. The Contractor shall employ maintenance electro-mechanical personnel who have received formal training to maintain generators, and the electro-mechanical components of the radar sub-systems.

10. TRAINING REQUIREMENTS

10.1. NATO will provide initial operator/controller and maintainer in-factory, equipment specific training.

10.2. NATO will provide maintenance instructor training for two (2) maintenance staff members.

10.3. The Contractor shall make its personnel available for the NATO provided training described in paragraphs 10.1 and 10.2. The contractor shall pay for travel and subsistence costs for its personnel whilst under training.

10.4. The Contractor shall develop and implement a Training plan to ensure its personnel; beyond those highlighted in paragraph 10.1 and 10.2 are fully trained and qualified throughout the life of the contract. The training plan shall include but not be limited to both ATC and maintenance personnel. The draft plans shall be provided to NAMSA as part of the proposal. Final plans shall be provided 30 days after contract signature. It shall at a minimum include:

10.4.1 Address how personnel's specific qualifications and licenses will be endorsed and maintained for currency at KAF during the life of the contract.

10.4.2 Include the provision for the training of any ATC qualified personnel to effect a seamless transition at the expiry or termination of this contract.

10.4.3 Include the provision for training of ATC and maintenance personnel for the specific equipment which the Contractor will operate throughout the duration of this contract, as agreed to by NAMSA.

10.5. NATO will provide initial training course materials for the installed systems/equipment for incorporation into the Contractor's provided training plan. The Contractor shall be responsible to ensure the training material is kept up to date and current throughout the life of the contract.

11. REAL LIFE SUPPORT REQUIREMENTS

11.1. The Contractor shall arrange and manage his own real life support requirements and maintenance infrastructure for the delivery of services addressed in this SOW.

11.1.1. The space currently provided for ATM within the Base Operations Centre (BOC) will be made available to the Contractor to provide the same capability as presently exists. In addition, there will be space in the tower and equipment shelters but the Contractor shall be prepared to provide and maintain all working facilities such as office space, workshops, storage facilities and any associated infrastructure required for the delivery of the ATM services outlined in this SOW in case the space provided is inadequate.

11.1.2. The Contractor shall provide accommodations for personnel during the mobilization of the ATM services including; food, laundry, temporary accommodations, power, water, and sewage facilities.

11.1.3. The Contractor shall provide accommodations for personnel during the delivery of the ATM services including; constructing permanent accommodations and Morale, Welfare and Recreation (MWR) facilities. (NATO may provide access to all power, water and sewage utilities but, there is a possibility that they will not be available upon Contractor mobilization. Therefore, the Contractor shall be prepared to be self-sufficient and provide their own power, water and sewage facilities until they become available).

11.1.4. Connecting the facilities to existing water, sewage and power network, in its current configuration.

NATO UNCLASSIFIED
Releasable to NATO/ISAF and Contractors

11.1.5. All accommodations and facilities shall be in accordance with COMKAF regulations including, but not limited to those described in Annex E.

11.2. Annex F provides the process by which the Contractor shall obtain fuel for its vehicles and generators.

11.3. For planning purposes the current scheduled rates (in Euros) for RLS are found below:

1. Potable water .00823 per gallon.
2. Non-potable water .00206 per gallon.
3. Sewage .00771 per gallon.
4. Solid waste price per person per month 10.78477.
5. Portable Toilets +/- 2.47 per day.
6. Hand Wash Stations +/- 0.34 per day.

11.4. The provision of an Infrastructure Construction plan including but not limited to real estate requirements, proposed building layouts and power, water, sewage requirements. A draft plan shall be provided with the proposal and final plan shall be provided 30 days after contract signature. This information will be used by NAMSA to assist in the allocation of the required real estate.

12. SUPPLY REQUIREMENTS

12.1. NATO will provide an initial lay-in of NATO Furnished Equipment (NFE) and NATO Furnished Parts (NFP) that will be provided at Contract start, for the radar, NAVAIDS, Displays, Communication systems, Telephone systems, Meteorological Systems and all other systems necessary for navigation and communications in support of the ATM system.

12.2. The Contractor shall:

12.2.1. Supply all spare parts and materials not provided as NFE/NFP. All Contractor Furnished Equipment (CFE) materials (direct and indirect) shall meet the relevant prime manufacturer specifications as applicable.

12.2.2. Maintain stock levels of all spares, test and other maintenance equipment, Automated Test Equipment (ATE) facilities, either NFE or CFE provided, in accordance with the NATO approved Recommended Spare Parts List or Equipment lists that will be provided at Contract start.

12.2.3. Have the accounting and inventory management responsibility for the NFE, and shall maintain the records in accordance with ACE Directive 60-80, Reference E. Any withdrawal from stock shall be accounted for and registered against the work order for which the drawn item was needed

12.2.4 Provide to NAMSA on an annual basis, and on demand, a consumption and inventory report of the NFE/NFP.

12.2.5. Permit NAMSA, subject to prior notification, to inspect/verify/adjust the NFE/NFP and all related records of the Contractor whenever deemed necessary. Inspection / verification / adjustment of the Facility Stock may be performed at any time by NAMSA's Representative.

12.2.6. Maintain an adequate supply of, and will be responsible for the storage of such consumable items to support his operations in accordance with the OEM's recommendations and in order to meet restoration requirements of

Annex B. Any changes to the spares holding will only be implemented upon approval from NAMSA.

12.2.7. Ensure all spare parts and material shall meet the relevant manufacturer specifications.

12.2.8. Be the Memorandum Receipt Account Holder (MRAH) for all NFE/NFP and equipment associated with these services.

13. CIS REQUIREMENTS

13.1. NATO will provide CIS to facilitate direct communications between the Contractor and NATO. The Contractor shall provide all CIS required for internal company requirements. The Contractor shall be responsible for the provision of any CIS equipment that he considers is required to deliver and maintain his services including the provision of any required reach-back out of Afghanistan to head-offices, sub-contractors etc. It is the responsibility of the Contractor to ensure that he has sufficient CIS to perform his function. This shall include, but may not be limited to, computers, scanners, printers, modems, telephones, mobile radios, etc. as well as required cabling for connectivity and power.

13.2. Any such CIS equipment operating in KAF shall conform to standards and regulations, including Information Security (INFOSEC), as directed by NATO, ISAF and COMKAF, including but not limited to physical location, frequency transmission, signal strengths, approved system types, interfaces, compatibility, accessibility to a common (unclassified) network, etc.

13.3. The Contractor shall operate, calibrate, certify, maintain and repair a crash telephone system which is required to link the Emergency Services with the ATC Tower and KAF Base Operations Centre.

13.4. The Contractor shall ensure that the following communication systems and procedures are followed:

13.4.1. Radio. All radio telephony used by personnel shall be in accordance with ICAO and Military phraseology standards and the safe control of all movements on the aerodrome.

13.4.2. Light Signals. The Contractor shall ensure that personnel are conversant with light signals that may be displayed from the ATC Tower for vehicles.

14. TRANSPORTATION REQUIREMENTS

14.1. The Contractor shall be responsible for transporting all equipment and supplies in order to fulfil his obligations as defined in this SOW. Transportation shall be coordinated and agreed with the relevant NATO Authorities, NAMSA and COMKAF (through the Military Chain of Command).

14.2. All transportation required for the provisioning of this service shall be the responsibility of the contractor.

15. RECORDING AND REPORTING REQUIREMENTS

15.1. The Contractor shall maintain an Operational Daily Log which will be subject to, and kept available for, inspection at all times.

NATO UNCLASSIFIED
Releasable to NATO/ISAF and Contractors

15.2. The Contractor shall maintain a log of work orders which will be subject to, and kept available for, inspection at all times.

15.3. The Contractor shall provide monthly, and on demand, performance and maintenance reports. (in a format TBD).

15.4. The Contractor shall provide four types of reports (in a format TBD), these shall be designed as:

15.4.1. Observation Reports. These will focus on bottlenecks and issues affecting any function and shall include any brief (or detailed) alternative proposals to remedy local situations.

15.4.2. Management Reports. These will include summary results of all inspections, audits, assessments and investigations performed under the terms of the contract. The Contractor shall highlight, or identify, areas of significant concern and will include proposed solutions, alternatives and recommendations to higher authority for approval and implementation where merited. This summary will include details such as critical quantitative data such as performance indicators which can be tabulated against corresponding targets. These will be produced on a regular basis and may be used by NAMSA and COM KAF to both manage and monitor Contractor performance (in a format TBD).

15.4.3. Incident Reports. The Contractor shall submit such reports each time an incident (or accident) occurs that may, or have the potential to result in:

15.4.4.1. Injury or loss of life.

15.4.4.2. Damage or loss of property.

15.4.4.3. Any other incident which may have cause to bring either NATO or the Contractor into disrepute.

15.4.4.3. Air Incident reporting required in accordance with ICAO and Reference B.

15.4.5. Statistical Reports. The Contractor shall submit weekly statistical reports which track data on air traffic flow into, out of and over KAF, and as agreed upon with NAMSA.

15.5. Asset registers and records shall be maintained including any testing, statutory inspections / obligations, monitoring, diagnostics and analysis designed to identify any recurring defects or adverse trends.

15.6. Exchange of electronic data between the contractor and NAMSA will be in a mutually agreed format, and with due consideration for any system security requirements. Data will be provided in a machine readable format, and the transfer may take place electronically (for example via email) or physically (for example via a CD-ROM). Typically the data will be formatted in a standard and appropriate way (for example, PDF for documents or Comma Separated Values for data files). NAMSA's standard office information system uses Microsoft Office 2003, so editable documents, spreadsheets; presentations etc should be compatible with this suite. It shall be the contractor's responsibility to ensure that the data they provide is acceptable to NAMSA's systems.

15.7. The Contractor is responsible for safeguarding all digital and analogue data, as appropriate, from voice (radio and telephone/landline) and radar data in order that it is available, if required to support any investigation. The data is to be retained in accordance with the requirements of ICAO documentation.

15.8. The reports and documentation are considered NATO property and shall be retained for the life of the contract for handover to NATO upon termination of the contract.

15.9. Annex G provides an overview of the reports, with delivery requirements, that the contractor shall provide.

16. QUALITY ASSURANCE

16.1 The Contractor shall comply with internationally recognized standards such as: EU, international and industrial standards, Environmental Management System (ISO 14001:2004), Occupational Health and Safety Assessment Series (See Applicable Documents); Fire Prevention regulations; these should be in line with the conditions required to comply with ISO 9001~9004 international standards.

16.2. The Contractor shall develop and implement a Quality Management Plan (QMP) and/or Quality Plan (QP) that conforms (typically) to the precepts and intent of ISO 9001:2008 Quality Management Systems - Requirements.

16.3 The Contractor shall provide a draft copy of the QP / QMP with the technical proposal and submit his Final QMP including his Implementation Plan within 30 calendar days after contract award.

16.4. The Contractor shall produce Operating Procedures (OPs) for all areas, which shall be developed for implementation, initial draft with the proposal and final no later than 30 days after contract signature. These OPs, as part of the quality documentation of the Contractor, will be audited.

16.5. NAMSA will assign suitably qualified personnel or other entities to perform periodic inspections/audits and verifications of the services performed by the Contractor, including the Contractors' processes (as specified in Contractor Quality Plan (QP) / Quality Management Plan (QMP)) and the OPs. Such inspections/audits and verifications shall be carried out in a reasonable manner so as to not unduly delay the timely provision of services.

17. SAFETY MANAGEMENT (SM) SYSTEM

The Contractor is responsible for producing and maintaining a SM Plan and system that conforms to ICAO documentation. SM is an important area and the Contractor must ensure that a SM culture is embedded within the ATM Service organisation at KAF.

18. DEFINITIONS OF TERMS AND ACRONYMS

The following tables Terms, Expressions and Acronyms that may be used throughout this document. They shall have that meaning associated with them:

Abbreviation/Acronym	Meaning
AIP	Aeronautical Information Publication
AOS	Airfield Operating Surfaces
ATC	Air Traffic Control
ATM	Air Traffic Management
ATMS	Air Traffic Management Service
CC-Air HQ Ramstein	Component Command Air – NATO Air Headquarters group based in Ramstein (Germany)

NATO UNCLASSIFIED
Releasable to NATO/ISAF and Contractors

CFE/CFP	Contractor Furnished Equipment/Contractor Furnished Parts
CIS	Communication and Information System(s)
COM KAF	Commander Kandahar Airfield – The Senior Military Commander
CTA	Control Terminal Area
DAC	Dangerous Air Cargo – This could be HAZMAT or Explosives/Ammunition
DRDF	Digital Radio Direction Finder
EU	European Union
Facility	Defined as 'a structure and all equipment included/contained within that structure'
FOC	Full Operational Capability
FOD	Foreign Object Debris – Litter, of any type, on the Airfield which may pose a risk to Aircraft
FW	Fixed Wing Aircraft
HAZMAT	Materials or Goods which by there nature are Hazardous to Health
ILS	Instrument Landing System
IATA	International Air Traffic Association
ICAO	International Civil Aviation Organisation
Info-Hub	NAMSA Web Information Site for Contractors (and NATO)
ISO	International Standards Organisation
IT	Information Technology
ISAF	International Security Assistance Force
JFC	Joint Force Command
JFCB	Joint Force Command Brunssum – NATO Headquarters Group based in the Netherlands
KAF	Kandahar Airfield
KAF CTA	Kandahar Airfield Control Terminal Area of dimensions 50 nm. radius centred on KAF to FL 290
LCH	Afghanistan (or any other non-International or NATO contractors) legal entities or individuals contracted by NATO/ISAF as Local Civilian Hires, to provide goods and services of whatever nature within the region and within the framework of RLS to military operations. This not only includes contractor's employees but also sub-contractors and their employees acting within similar terms and conditions
LEC	Locally Employed Civilians
Maintenance	Custodial cleaning, sanitization, repair and lubricating/servicing in accordance with applicable safety regulations, maintenance guidelines, handbooks/manuals, billeting and administrative standards. May be preventative or corrective in nature.

NATO UNCLASSIFIED
Releasable to NATO/ISAF and Contractors

MDS	Material Data sheet – Applies to HAZMAT
MOG	Maximum On Ground
MTA	Military Technical Agreement which is the legally binding agreement outlining the Status of Forces between NATO and regional governments
MTBF	Mean Time Between Failure
NATO	North Atlantic Treaty Organisation, its subsidiary bodies, military Headquarters and all its constituent national elements/units acting in support of, preparing for or participating in military operations
NFE/NFP	NATO Furnished Equipment/NATO Furnished Parts
NATO Contractors	Non-Afghanistan legal entities or individuals, not normally resident in that country, contracted by NATO/ISAF to provide goods and services of whatever nature within the region and within the framework of military operations. This includes contractor's employees as well as sub-contractors and their employees. This does not include local contractors.
NATO/ISAF Personnel	Military and civilian personnel assigned or attached to, or employed by NATO/ISAF and International Partners which are operating under NATO command and control arrangements. This with the exception of personnel locally hired.
NAMSA	NATO Maintenance and Supply Agency
NFE	NATO Furnished Equipment – That is owned by NATO support
NFP	NATO Furnished Parts – Spare parts & material that is owned by not NATO
NC3A	NATO Consultation, Command and Control Agency – a project Management organization
NOTAM	Notice To Airmen
OAKN	International Air Code allocation for Kandahar
OEM	Original Equipment Manufacturer
PANS-OPS	Procedures for Air Navigation Services – Aircraft Operations
PAR	Precision Approach Radar
PfP	Partnership for Peace - Countries working alongside NATO (although not Members)
PPR	Prior Permission Required
PSA	Provisional Site Acceptance
PSR	Primary Surveillance Radar
QMP	Quality Management Plan
QMS	Quality Management System
RAG	Runway Arrestor Gear – Safety mechanism used in Fast Jet Operations
RLS	Real Life Support

NATO UNCLASSIFIED
Releasable to NATO/ISAF and Contractors

RW	Rotary Wing aircraft
SOW	Statement of Work
Stakeholder Nation(s)	The principle nations (currently Canada, Great Britain, the Netherlands, the United States of America and Joint Force Command Headquarters (JFCB HQ) Brunssum who maintain management control of the KAF RLS project
STANAG	Standardization Agreement which set up processes, procedures, terms, and conditions for common military or technical procedures or equipment between the member countries of the alliance and are in common use whilst supporting military operations
TAT	Turn Around Time - Time between the receipt of an item and the shipment of the item after the maintenance has been performed
Territory	The land territory, airspace and contiguous zone over which the Islamic Democratic Republic of Afghanistan exercises sovereignty in accordance with international law
Third Party	Any legal entity or physical person present in the territory of the Islamic Democratic Republic of Afghanistan and that is not a party to the Military Technical Arrangement (MTA)
TACAN	Tactical Air Navigation (aid)
TOA	Transfer of Authority – Date at which the US hands over management responsibility for KAF to the Stakeholder Nations.
UAV	Unmanned Aerial Vehicles