**AIR TRAFFIC AND NAVIGATION SERVICES CO. LTD**

**REPUBLIC OF SOUTH AFRICA**



**REQUEST FOR PROPOSALS: ATNS/TPQ/RFP011/23.24/TIME SYNCHRONISATION SYSTEMS**

**THE APPOINTMENT OF A SERVICE PROVIDER FOR THE SUPPLY, DELIVERY, INSTALLATION, COMMISSIONING, MAINTENANCE, AND SUPPORT OF GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) / GLOBAL POSITIONING SYSTEM (GPS) NETWORK TIME PROTOCOL (NTP) TIME CLOCK SYNCHRONISATION SYSTEMS WITH A SYSTEM LIFECYCLE OF FIFTEEN (15)-YEARS.**

**VOLUME 3**

**PROJECT MANAGEMENT REQUIREMENTS**

**The information contained within this document is confidential to ATNS in all respects and it is hereby acknowledged that the information as provided shall only be used for the preparation of a response to this document. The information furnished will not be used for any other purpose than stated and that the information will not directly or indirectly, by agent, employee or representative, be disclosed either in whole or in part, to any other third party without the express written consent by the Company or its representative.**

|  |
| --- |
| **REVISION INDEX SHEET** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version** | **Revision** | **Date** | **Reason for Change** | **Pages Affected** |
| 0 | 1 | 02/08/2022 | Initial Document | All |
| 0 | 2 | 10/08/2022 | Document Revised | All |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

|  |
| --- |
| **TABLE OF CONTENTS** |

[ABBREVIATIONS 4](#_Toc111028975)

[1 GENERAL INSTRUCTIONS TO BIDDERS 5](#_Toc111028976)

[2 BIDDER/CONTRACTOR OBLIGATIONS 6](#_Toc111028977)

[3 PROJECT MANAGEMENT 6](#_Toc111028978)

[3.1 General 6](#_Toc111028979)

[3.2 Project Management Plan 8](#_Toc111028980)

[3.3 Project Status Reports 9](#_Toc111028981)

[3.3.1 General 9](#_Toc111028982)

[3.3.2 Master Project Schedule 9](#_Toc111028983)

[3.3.3 Activity Dictionary 9](#_Toc111028984)

[3.4 Data Management 10](#_Toc111028985)

[3.5 Progress Review Meetings 11](#_Toc111028986)

[3.5.1 Requirements 11](#_Toc111028987)

[3.5.2 Matters for Consideration 11](#_Toc111028988)

[3.5.3 Participants in Progress Review Meetings 13](#_Toc111028989)

[3.5.4 Documentation 13](#_Toc111028990)

[3.5.5 Costs 14](#_Toc111028991)

[3.6 Work Breakdown Structure 14](#_Toc111028992)

[3.7 Resumes of Key Personnel 14](#_Toc111028993)

[3.8 Resource Allocation Plan 15](#_Toc111028994)

[4 SYSTEM ENGINEERING 16](#_Toc111028995)

[4.1 System Engineering Master Plan 16](#_Toc111028996)

[4.2 Installation, Transitioning and Commissioning (ITC) Plans 18](#_Toc111028997)

[4.3 Technical Review Meetings 18](#_Toc111028998)

[4.4 Health and Safety Management Plan 19](#_Toc111028999)

[4.5 Risk Management Plan 20](#_Toc111029000)

[5 QUALITY ASSURANCE 21](#_Toc111029001)

[5.1 Quality Assurance Plan 21](#_Toc111029002)

[5.2 Quality Assurance Audits 22](#_Toc111029003)

[5.3 Responsibility for Quality Assurance 22](#_Toc111029004)

[5.4 Contract Data Requirements List 23](#_Toc111029005)

|  |
| --- |
| ABBREVIATIONS |

ATNS Air Traffic and Navigation Services

CDRL Contract Data Requirements List

EPM Enterprise Project Management

FAT Factory Acceptance Test

ITC Installation, Transition and Commissioning

PBU Period of Beneficial Use

PMP Project Management Plan

QA Quality Assurance

RFT Request for Tender

SAT Site Acceptance Test

STD Standard

TEMP Test and Evaluation Master Plan

WBS Work Breakdown Structure

# GENERAL INSTRUCTIONS TO BIDDERS

The Bidder shall submit all responses, diagrams, project management documentation and drawings according to the GENERAL INFORMATION AND INSTRUCTIONS TO BIDDERS document and in the English language.

To assist Bidders only, each paragraph or article has been appended throughout with the letters “(M)”, “(D)”, “(O)” or “(I)”, to indicate whether the requirement is **M**andatory, **D**esirable, **O**ptional or for **I**nformation only.

**ALL RESPONSES TO THE REQUIREMENTS IN THIS DOCUMENT SHALL BE PROVIDED AS FOLLOWS:**

BIDDERS SHALL RESPOND IN FULL TO EACH ITEM IN THE FORMAT PROVIDED AND REFERENCES (CHAPTER, SECTION, PAGE NUMBER, PARAGRAPH NUMBER) TO DOCUMENTS AND RELEVANT INFORMATION SUPPORTING THE RESPONSES SHALL BE INDICATED IN THE SPACE PROVIDED. THIS INFORMATION WILL BE THE **ONLY RESPONSE USED FOR THE EVALUATION AND ASSESSMENT**.

Responses, provided in the space allowed, that are not clear or inadequate or the lack thereof shall be interpreted as **“Not Compliant”** even though the compliance column is declared as “Comply” and/or the Bidder’s offer meets the requirement. Bidders shall ensure that each response correctly addresses the requirement stated. Responses not addressing the requirement of the specific paragraph shall be interpreted as **“Not Compliant”**.

Bidders shall declare compliance to each and every paragraph of this document in the column labelled “Compliance” as follows:

C: fully compliant = 2 points

PC: partly compliant = 1 point

NC: not compliant = 0 points

Noted: Noted and accepted (applicable to paragraphs marked as “I”, not containing requirements)

Bidders shall, for paragraphs declared “PC” or “NC”, include a statement as to the nature of the variation and may supply additional supporting information in the space provided to demonstrate how the proposal may still meet the needs of ATNS.

**Paragraphs marked “(M)”**, indicates that the requirement is mandatory and proposals that do not comply with the requirement **shall** be disqualified for further evaluation.

**Paragraphs marked “(D)”**, indicates that the requirement is desirable, and the Bidder is expected to declare their level of compliance, provide a formal response and reference supporting documents.

**Paragraphs marked “(I)”**, indicates that the requirement is for information, however the Bidder is still expected to respond and provide information if requested. Any information gathered herein may form part of the contractual terms.

**Paragraphs marked “(O)”**, indicates that the requirement is optional, and the Bidder may decide how to respond.

# BIDDER/CONTRACTOR OBLIGATIONS

1. The Bidder shall provide a compliance statement to each specification to confirm that, if the Bidder is appointed as the Contractor, all requirements and obligations stated in this specification shall be complied with. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[THE BIDDER SHALL INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

# PROJECT MANAGEMENT

## General

1. The Contractor shall establish, implement and maintain extensive and comprehensive Project Management plans throughout the period of any Contract arising from this RFT. These Plans will be submitted to the Company for information and reporting purposes. Summary level plans, specific to this project shall be submitted with the Tender and will be refined as necessary during the Contract development and reporting phases. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The Project Management of the Time Synchronisation Project is the responsibility of the Contractor. Submitting the Project Management Plans to and their acceptance by the Company do not imply approval or concurrence by the Company nor does it absolve the Contractor from the Project Management responsibilities. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The Contractor shall divide the plans into activities, which can be managed, monitored, and measured in terms of duration, cost, risk and resources. These activities shall be organised into logical networks. Such networks shall be used by the Contractor as the main framework for planning, budgeting, controlling and reporting to the Company throughout the period of the Contract. These networks shall be closely linked to the various System Engineering Plans and activities to ensure the rapid and accurate reflection of any System Engineering decision. A draft framework of measuring project activities shall be submitted at tender. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The Tenderer shall present ATNS with a Project Management plan in the Microsoft Project® format for integration into the ATNS Enterprise Project Management (EPM) system. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. Project Management shall encompass the management of all the various facets of the project as defined in the Contract. These including design, development, production, supply of ancillary equipment, resource allocation and control, management of sub-contractors, on-site installation and construction, testing, transitioning, commissioning, transportation, all Integrated Logistic Support activities, staff movements and subsistence, etc. The Tenderer shall clearly demonstrate these aspects in the requirements described in the following parts of the document. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The Contractor shall prepare for, actively participate in, and respond to the Project Meetings, prepare and present comprehensive reports, and produce adequate documentation as described in the following parts of this document. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The implementation of the project will be deemed successful once the FAT, installation of all deliverables, update of all documentation and all SATs have been completed by the Contractor and accepted by ATNS. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

## Project Management Plan

1. The Tenderer shall submit a draft Project Management Plan (PMP) as part of the tender. The Project Management Plan will be a formally accepted and approved document used to manage and control project execution throughout the project life-cycle phases. The PMP will detail all the activities necessary to successfully complete the project and shall refer to the other plans developed under the project. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

## Project Status Reports

### General

1. The Contractor shall provide at two-weekly intervals (or at other mutually agreed intervals) Project Status Reports to the Company, which documents project performance to date, and makes recommendations for future implementation and changes. Project status shall be presented relative to schedule critical path and cost and shall also include a Risk Report. The Risk Report shall identify risks and the measures taken either to manage or avoid the risks. Project status shall also include the Master Project Schedule and Schedule Analysis. The Contractor shall promptly submit to the Company any Master Project Schedule which, when updated, shows a negative float or indicates a significant change to the delivery schedule. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

### Master Project Schedule

1. The Contractor shall develop, maintain, and track progress against a Master Project Schedule. The Master Project Schedule shall be organized to depict the flow of work, the task interdependencies and the interrelationships necessary to accomplish the program objectives from Contract Award to completion of the contract. The Master Project Schedule shall be broken down to a sufficient level of detail. Only MS Project shall be acceptable. The schedule shall also address the Logistic Support Programme. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

### Activity Dictionary

1. The Contractor shall provide the Company with an Activity Dictionary. Each activity definition shall be brief and concise. The activity dictionary shall define at least the following attributes:
	* 1. state the work to be accomplished;
		2. target start/target finish;
		3. actual start/actual finish (if applicable);
		4. minimum, maximum and most likely duration of each activity;
		5. manpower required to complete activity; and
		6. any other resource associated with the activity.

**Note:** Once the Company is in possession of an approved and comprehensive dictionary, exception reporting only is required in the Project Status Report (i.e.: new activities or a change in an activity). This however does not exclude the requirement to report on the risks on a monthly basis. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The Contractor shall provide the Company with a Schedule Analysis as part of the Project Status Report. This shall be a written analysis of project performance, future predictions and recommendations against time and cost objectives. The analysis shall also contain a statement of current resources applied to the project including materials, plant, space occupied on Company premises, costs and manpower. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

## Data Management

1. The Contractor shall establish and operate a data management system as part of the overall project management scheme. The plan shall define the methods for identification, preparation, tracking and updating of all relevant data. A draft plan shall be submitted as part of the tender. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

## Progress Review Meetings

### Requirements

1. The Contractor shall attend Progress Review Meetings at monthly intervals (or at other mutually agreed intervals) to present a Project Status Report. The regular Progress Review meetings shall be held in South Africa at either the Contractors premises or at the Company’s Office, or at other mutually agreed locations. A copy of the Contractor’s written Project Status Report and meeting presentation material shall be submitted to the Company at least one week prior to the Progress Review Meeting. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

### Matters for Consideration

1. The Contractor shall make a presentation on the progress of the project to date, a projection of the effects of variations from the previous schedule, and any action taken or recommendations for action to rectify existing or anticipated problems. All aspects of the project status shall be presented, all data must be both current and accurate, and the summary of the accomplishments of the Contractor and subcontractors to date must be detailed and accurate. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The presentation shall include a forecast of trends in terms of technical, cost and schedule performance through to completion of the Contract. (I)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC/Noted)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The presentation shall also focus attention upon, and provide insight into, the interrelationships among the project elements including subcontractors. Design and Management problems will also be addressed. (I)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC/Noted)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. Significant slippages, obstacles, or discrepancies between planned, actual and forecast project progress shall be addressed through a narrative analysis of cause, effect and proposed or completed corrective action. (I)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC/Noted)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The Contractor shall present, at the request of the Company, any data for proposed work constituting a variation to the Contract or Engineering Change Proposals. The Contractor shall be prepared to provide supporting data on assumptions made and methodologies used in arriving at specific conclusions, recommendations and alternatives to the design approach. There shall be a free and unlimited exchange of information between the Contractor and the Company in order to establish progress of the project, to identify problems and to agree on the method of timely resolution. (I)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC/Noted)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

### Participants in Progress Review Meetings

1. The Contractor shall be represented by appropriate key personnel in each significant area to be considered during the meeting to enable effective discussion of Agenda items and the Progress Report. The Project Manager and relevant specialists, including logistic support personnel shall represent the Company. The Project Manager will chair the Progress Review Meetings. (I)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC/Noted)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

### Documentation

1. The Contractor shall submit a draft Agenda for Company concurrence at least two weeks prior to a scheduled Progress Review Meeting. The Company may submit items for inclusion in the Agenda. The Contractor shall provide administrative support for the meeting and prepare and distribute a draft record of the minutes of the meeting within one week of the meeting. The minutes are to include an Action Item List. The Company and the Contractor shall submit any updates of the Action Item List during the meeting. The Company and the Contractor prior to the next meeting shall review the draft minutes for accuracy. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The Contractor shall prepare appropriate presentation material and make presentations at the Meeting to address all items required in the Progress Report. (I)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC/Noted)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

### Costs

1. The Contractor and the Company will each meet their own costs associated with attending Progress Review Meetings. (I)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC/Noted)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

## Work Breakdown Structure

1. The Work Breakdown Structure (WBS) is an important tool, which will enable the Company to maintain visibility of the project elements. The WBS shall be to the level where work is to be managed, monitored, and evaluated. The WBS shall describe the work that will be accomplished and shall facilitate management data collection and reporting. The Contractor shall use a single, program WBS as the basis for all project work scope. The Tenderer shall include an outline WBS in the response to the RFT. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

## Resumes of Key Personnel

1. Tenderers shall submit resumes of key personnel, suitably qualified and experienced to execute the envisaged works to be dedicated to the project. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

## Resource Allocation Plan

1. Tenderers shall submit with their tender a Resource Allocation Plan, which identifies the resources, including subcontract resources, to be applied to each element of the project as detailed in 2.3.3. The Plan shall clearly identify all work proposed to be undertaken by subcontract. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The Tenderer shall ensure that only appropriately qualified and experienced personnel will be employed on the tasks. The Company shall retain the right to direct the Contractor to remove from the project any personnel considered by the Company to be inappropriately qualified or experienced, or unacceptable to the Company. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. Tenderers shall give full details of their proposed internal organization for this project. The full project organization structure shall be presented, including relevant names and resumes of personnel responsible for and to the Project Manager. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The Time Synchronisation Project involves close liaison with the Company and there are elements of the project installation and commissioning which may require the Contractor to utilise Company staff. Tenderers shall submit with their tender a description of the elements of their proposal, which will involve assistance by Company staff. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

# SYSTEM ENGINEERING

## System Engineering Master Plan

1. For the purposes of this project, the Systems Engineering process is defined as an integral set of activities, documentation control procedures and standards that enable and assist in the management of this project to progress through its various stages, including analysis of requirements, design, installation, setting to work, testing, operational evaluation, commissioning and maintenance, and establishment of logistic support for the whole life cycle of the project. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The tenderer shall submit with this tender a systems engineering management plan that is in accordance with IEEE Std 1220-2005. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The Contractor shall be responsible for the total performance of the project. The Tenderer shall indicate in their proposal how aspects of quality and performance will be managed and assured throughout the project lifecycle. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. Tenderers shall clearly indicate what will be expected as customer furnished information or equipment. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. Specific testing and evaluation procedures for the various Acceptance Tests (e.g. Factory Acceptance Testing, Site Acceptance Testing, Physical Inspections, Final Acceptance, etc.) shall be defined in the Test and Evaluation plan for each deliverable. A draft Test and Evaluation Plan or sample shall be submitted as part of the tender. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The Contractor shall prepare, implement and maintain a Test and Evaluation Master Plan (TEMP) that describes the Contractor’s plan for all Tests and Evaluations to be undertaken in demonstrating compliance with the technical, operational, contractual and performance requirements of the project. The Plan shall include an Acceptance matrix, which identifies all deliverables and methods of testing proposed by the Tenderer to demonstrate compliance. A draft TEMP specific to the project scope shall be submitted with the tender. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

## Installation, Transitioning and Commissioning (ITC) Plans

1. The Contractor shall prepare an Installation, Transitioning and Commissioning Plan to clearly indicate the proposed methodology for the installation of the time synchronisation, while the service provided by the existing system continues uninterrupted. The Plan shall furthermore indicate how the transition from the existing installation will be achieved, leading to the commissioning and acceptance of the new system. The Tenderer shall submit draft ITC plans. The following factors shall be taken into consideration when developing the transition plan. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The Contractor shall be responsible for the execution of the plan under the supervision of ATNS technical personnel. (I)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC/Noted)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

## Technical Review Meetings

1. The Contractor will be required to conduct technical system reviews and meetings with Company personnel. It is preferred that these reviews be held concurrently with Progress Review Meetings. The technical reviews and meetings shall consist of at least the following: (D)
	1. Requirements Review
	2. Preliminary Design Review
	3. Critical Design Review

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The above requirements are representative requirements and Tenderers may offer alternative plans, which must list and describe the Technical Reviews and Meetings they would propose for this project. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The Contractor shall be required to provide appropriate and adequate documentation in support of these reviews. Tenderers shall include in their tender a description of the level and extent of documentation to be provided at the Technical Reviews and Meetings. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

## Health and Safety Management Plan

1. The Contractor shall prepare a Safety Management Plan for the implementation of the project covering all envisaged risks related to the supply, delivery, installation and commissioning of the offered systems. The Tenderer shall submit a draft Health and Safety Management plan specific to the project scope and requirements as part of the tender response. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

## Risk Management Plan

1. The Contractor shall prepare a Risk Management Plan. Tenderers shall submit with their tender an outline of their policy and methodology for risk identification, assessment and abatement for all activities to be executed under this project, this shall encompass all phases of the project including the PBU period. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The Contractor shall maintain throughout the execution of the contract a risk register which identifies risks and opportunities, estimated level of risk and the consequences and risk reduction strategies associated with: (D)
	1. program objectives; and
	2. program schedules.

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The Contractor shall provide a Risk Report to each Progress Review Meeting to indicate the status and action associated with identified risk items. The format of the Risk Report shall be mutually agreed. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

# QUALITY ASSURANCE

## Quality Assurance Plan

1. Tenderers shall include in their tenders’ details of a draft quality management plan. The quality management plan shall include measures and standards that were used for the development of the project deliverables offered and those that are applicable for the successful delivery of time synchronisation project. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The Bidder shall include with the offer, proof of certification by an accredited ISO body, or objective evidence of documented QMS that is not certified but complies with ISO9001 (i.e. details of quality assurance procedures, work instruction, methods etc.). (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. Bidders must indicate the QA measures and standards that were used for the development of the systems offered and those that are applicable for the successful delivery of the project. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

## Quality Assurance Audits

1. Audit reports in respect of the Time Synchronisation Project as prepared by the Contractor as part of their internal Quality Assurance (QA) procedures, and details of any corrective action reports and corrective action taken, shall be submitted to the Company. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The Company reserves the right to perform any inspections, tests or audits at the Contractor’s or major sub-contractor’s premises at any time when such tests are deemed necessary to ensure Supplies and Services conform to specified requirements. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

## Responsibility for Quality Assurance

1. The Contractor shall be responsible for ensuring that the quality of equipment supplied in accordance with the terms of the Contract, and any installation activity performed, fully conforms to the prescribed requirements. The Company will undertake a monitoring and audit role in relation to the Contractors Quality Management Plan and program to determine whether equipment or installation deliverables meet the contractual requirements. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

## Contract Data Requirements List

1. Tenderers shall submit a proposed Contract Data Requirements List (CDRL) which incorporates all data requirements stated in this RFT, together with a delivery schedule. Tenderers shall also identify any additional data or documentation that they consider shall be included in the CDRL, together with a description of the item and the reason for inclusion, for the purpose of operating and maintaining the System. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. The CDRL shall identify the status of the CDRL item, i.e. draft, final. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |

1. All CDRL items shall be delivered to the Company in draft format for Company concurrence prior to final delivery. The Contractor shall be responsible for timely delivery of all CDRL items consistent with the overall project schedule. (D)

|  |  |
| --- | --- |
| **COMPLIANCE (C/PC/NC)** |  |
| *[INSERT FULL RESPONSE FOR EVALUATION HERE]* |
| *[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]* |