

**Project: Responsive Assistance for Priority Infrastructure Development (RAPID)
– Small and Minor Works –**

John Garang Memorial University of Science and Technology, Bor, South Sudan

**Contract Title: Upgrading of John Garang Memorial University of Science and Technology, Bor,
Jonglei State – South Sudan**

Annex F:

**Implementation Manual
(Quality Assurance and Control Plan)**

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IPI Form 019 Project Documentation Control Plan

PROJECT IMPLEMENTATION PLAN

Project Title:

Project Number:

Project Location:

UNOPS Project Manager:

Date of Issue of Plan:

To Be Used Forms

Distribution:

Yes/No

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|--|--|--|---|---|--|--|
| <p>1. Project Overview and Summary</p> <p>1.1. Project Description (Outline scope of works)</p> <div data-bbox="263 822 1117 1285" style="border: 1px solid black; height: 200px; margin: 10px 0;"></div> <p>1.2. Project Participants and Stakeholders</p> <table border="1" data-bbox="263 1393 1128 1653"> <tr> <td data-bbox="263 1393 707 1653"> <p>Donor:</p> <p>Contact:</p> <p>Contact details:</p> </td> <td data-bbox="722 1393 1128 1653"> <p>Beneficiary:</p> <p>Contact:</p> <p>Contact details:</p> </td> </tr> </table> <table border="1" data-bbox="263 1713 1128 1995"> <tr> <td data-bbox="263 1713 707 1995"> <p>Consultant Architect:</p> <p>Contact:</p> <p>Contact details:</p> </td> <td data-bbox="722 1713 1128 1995"> <p>Contractor:</p> <p>Contact:</p> <p>Contact details:</p> </td> </tr> </table> | <p>Donor:</p> <p>Contact:</p> <p>Contact details:</p> | <p>Beneficiary:</p> <p>Contact:</p> <p>Contact details:</p> | <p>Consultant Architect:</p> <p>Contact:</p> <p>Contact details:</p> | <p>Contractor:</p> <p>Contact:</p> <p>Contact details:</p> | | |
| <p>Donor:</p> <p>Contact:</p> <p>Contact details:</p> | <p>Beneficiary:</p> <p>Contact:</p> <p>Contact details:</p> | | | | | |
| <p>Consultant Architect:</p> <p>Contact:</p> <p>Contact details:</p> | <p>Contractor:</p> <p>Contact:</p> <p>Contact details:</p> | | | | | |

Structural Engineer:

Contact:

Contact details:

Services Engineer:

Contact:

Contact details:

Specialist Engineering:

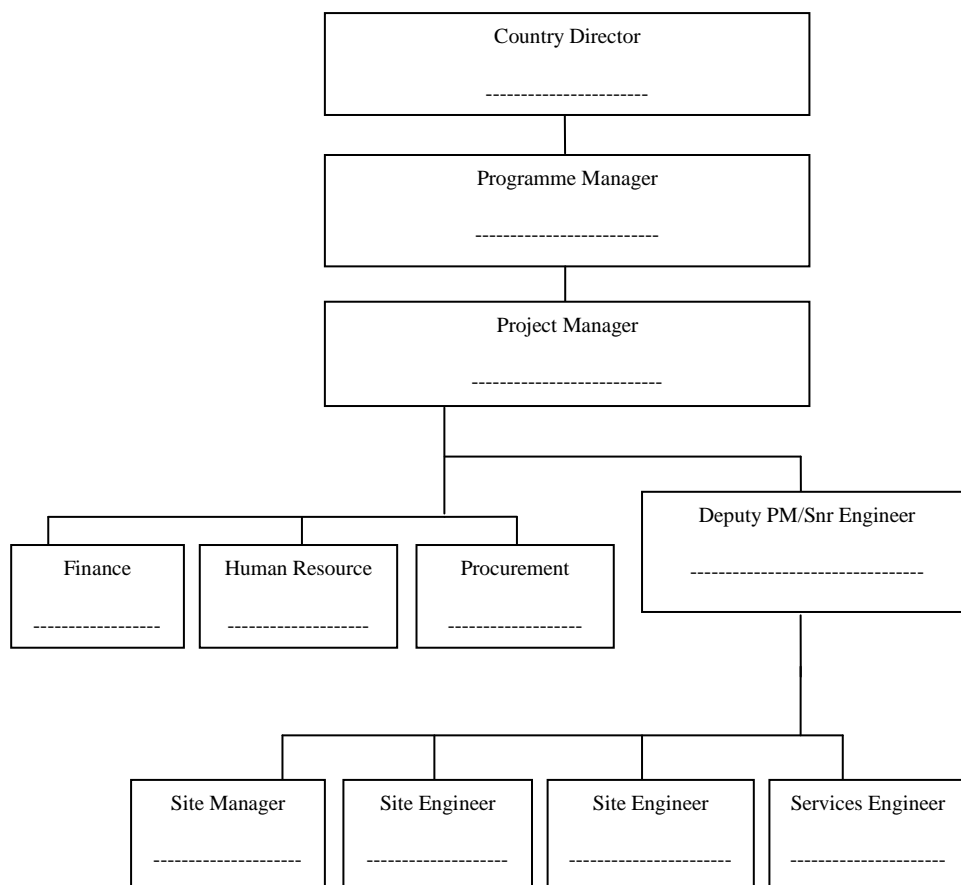
Contact:

Contact details:

Others:

1.3. UNOPS Project Structure

(modify to suit required project delivery structure)



1.4 Form of UNOPS Contracts for Works in use

(information regarding the selection of the most appropriate form of Contract can be found in UNOPS Contracts for Works guidance materials)

- ☐ Minor Works Contract
- ☒ Short Form Construction Contract
- ☐ Measured Price Construction Contract
- ☐ Lump Sum Construction Contract

1.5 Responsibilities

UNOPS will perform a central role in managing Health and Safety, Environmental and Quality control issues during the implementation of this infrastructure project. The UNOPS Project Manager shall be responsible for compiling and activating the Project Implementation Plan along with the UNOPS Health & Safety and Environmental Management manuals, tailored to meet the project specific requirements.

The UNOPS Project Manager will delegate to the appropriate project staff and site personnel specific responsibilities for the management tasks identified in the UNOPS Project Implementation Plan, Health & Safety and Environmental Management manuals for this project.

The UNOPS Project Manager will monitor and review the execution of the Project Implementation Plan, Health & Safety and Environmental Management manuals at least once every two months at a minimum. The reviews should ensure that the objectives and requirements of the plan and manuals are still valid and are being implemented and met. Particular attention should be paid to forthcoming key project tasks and activities ensuring there is pre-planning underway regarding Inspection Test Planning, Hazard and Risk Assessment and environmental management controls. A record of all monitoring and reviews undertaken shall be recorded on the Project Implementation Plan Monitoring and Review Log form (*IPI Form 001*).

1.6 Significant Objectives and Risks

Identify and list any significant Donor, Beneficiary and Stakeholder objectives relating specifically to the infrastructure works implementation. Ensure measures are identified and incorporated into the various UNOPS implementation documentation to ensure plans are put in place to meet these objectives.

Yes

IPI Form
001

Objectives:

- Promote ownership and sustainability of the project through use of local labour, both skilled and unskilled, where these are available

Identify and list the significant risks relating specifically to the infrastructure works implementation. Ensure these issues are incorporated into the appropriate risk assessment processes and procedures detailed within the UNOPS implementation documentation.

Risks:

- Potential conflict with the local population on employability to the project if terms are not clearly spelt out and communicated beforehand by the contractor.

The list of significant objectives and risks will be regularly reviewed and updated, with appropriate action taken as part of the Project Managers monitoring and review process as detailed in clause 1.5 above.

(In addition to identification and management within this document, significant infrastructure implementation risks should also be logged on the overall UNOPS project risk register (log) and processed, monitored and reported on according to the wider project procedures)

2. Contract Commencement

Immediately post award of the works contract to the selected Contractor and prior to the Contractor's mobilisation and starting of the works on site, UNOPS will hold a Contract Commencement meeting with the Contractor to address and review the numerous tasks, issues and activities relating to the commencement of the construction project.

It is important from the outset of the contract to reinforce and establish expectations, communication lines, processes and controls with the Contractor (as outlined within the bidding/contract documentation) to ensure best possible adherence to the contract conditions and the UNOPS processes and procedures to be adopted to assist in delivering the required project outcomes.

The Project Implementation Plan (IPI) form 002, "Contract

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| <p>Commencement Meeting” is to be used as the standard agenda and template for the contract commencement meeting.</p> <p>Initial site establishment and planning activities are an important part of the commencement process. Project Implementation Plan (IPI) Form 003 “Site Establishment Planning Checklist” is to be used as the standard agenda and template for reviewing initial site establishment requirements.</p> | <p>yes</p> | <p>IPI Form 002</p> |
| <p>3. Survey and Set out</p> <p>3.1 Survey and Testing Equipment</p> <p>The Contractor is responsible for the correct positioning of all the works on the project site. The accuracy of any set out and survey work is reliant on the calibration and condition of the survey and testing equipment used.</p> <p>UNOPS may require (wherever possible and feasible) formal verification and regular monitoring of the condition and calibration of the survey and testing equipment to ensure greater accuracy in the implementation of the works. (Equipment includes dumpy levels, laser levels, EDM’s, theodolites, etc).</p> <p>Where appropriate a measuring and test equipment inspection log shall be kept and maintained recording the regular testing and calibration of the equipment used on site. UNOPS IPI Form 004 “Measuring & Test Equipment Schedule” is to be used for this purpose.</p> <p>All measuring and testing equipment is to be safely stored while on site to ensure no damage or deterioration occurs.</p> | <p>yes</p> | <p>IPI Form 003</p> |
| <p>3.2 Survey/Set out</p> <p>Wherever possible a registered/certified Surveyor should be used to establish the primary site survey control stations in relation to the references specified in the Contract documentation and as agreed. A site set out control plan is required to be produced by the Contractor (and/or their Surveyor) with all the grid lines, datum points and other survey control points noted. All primary site survey control stations will have a suitable permanent mark and must be kept secure.</p> <p>The site set out control plan should be updated regularly to include any secondary survey control points. The Contractor may generate secondary survey control points as required to set out and control local areas of work. These control points shall be periodically checked for accuracy and be clearly identified and protected physically on site.</p> <p>Each site survey control station and secondary station in addition to being located on the overall set out control plan will also be individually detailed using the UNOPS IPI Form 005 “Site Survey</p> | <p>yes</p> | <p>IPI Form 004</p> |

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| Station Detail Sheet". | Yes | IPI Form 005 |
| <p>4. Programme and Planning</p> <p>4.1. The Construction programme</p> <p>Once the Contractors programme has been submitted, reviewed and approved in accordance with the Construction Contract conditions, regular review and monitoring of progress of the execution of the works next to the Contract programme is crucial.</p> <p>This project includes requirements for a monthly programme review process as part of a monthly progress report for the project. For project programme and planning it is critical that this review process is implemented and a set review cycle/time is agreed with the Contractor and included in the regular project meeting schedule (as "Contract Commencement Meeting" IPI Form 002).</p> <p>Regular formal programme reviews with the Contractor are recommended at least monthly (or more frequent as deemed required) and should be planned for.</p> <p>The approved Contractors programme should identify the critical path time activities linked through the programme for the works. Establishing and identifying the works critical path is crucial for assessing future impact of variations, delays and possible extension of time claims in terms of overall project duration.</p> <p>4.2 Two Weekly programme/Work Plan</p> <p>A detailed two weekly programme/work plan should be undertaken on all UNOPS projects. This detailed review and planning process ensures accurate monitoring by UNOPS site staff of the Contractors weekly progress and allows early identification of issues impeding the planned works. This review process requires a regular fortnightly meeting between the appropriate UNOPS site representative and the Contractors personal who is responsible for the programme delivery. At the fortnightly meeting UNOPS will review progress relating to the past two weeks of planned work verse what was actually achieved by the Contractor. The Contract will also present the planned work programme for the coming two weeks for discussion and review. UNOPS IPI Form 006 provides a format for the two weekly programme/work plan. It is critically important that the activities detailed within the two weekly programme/work plan correlate with the overall Contract programme.</p> | Yes | IPI Form 006 |
| <p>5. Implementation Controls</p> <p>The documents and procedures outlined within this section of the plan are to be used to assist with ensuring the works is implemented in accordance with the technical specifications, acceptable trade practice</p> | | |

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| <p>and identified testing requirements. The documents provide a planning, monitoring and recording tool for implementation.</p> <p>5.1. Inspection & Test Plan (ITP)</p> <p>All inspections and testing to be undertaken throughout the project to ensure processes and outcomes meet the specified requirements need to be planned and quality records maintained.</p> <p>An Inspection & Test Plan for each trade and/or significant work activity identifies the key performance criteria for the works and allows allocation of appropriate implementation control measures to assist achieving the required outcomes. Any specified hold points and approvals are incorporated in the activity planning along with allocation of the personnel responsible to monitor and implement. The Inspection & Test Plan provides a framework for the works to be packaged into controllable portions where specific risk and specification requirements can be identified and controlled.</p> <p>5.2 Trade/Activity Control Sheet</p> <p>Where applicable Trade and Activity Control Sheets can be used in addition to and in support of the Inspection & Test Plan. The Trade and Activity Control Sheet acts as a prompt, checklist, record and tool to control the implementation of a specific construction task in detail, ensuring specific specification requirements are met and risk managed, reducing the likelihood of defective work and need for costly repairs and rework.</p> <p>While compiling the Inspection & Test Plan for a particular activity, the appropriate Trade and Activity Control Sheets to be used to control the task should be identified.</p> <p>Standard Trade and Activity Control Sheets have been compiled for a majority of the implementation operations on a typical construction site. These sheets should be adjusted and modified to suite the project specific requirements. The Project team is encouraged to develop additional and new Trade and Activity Control Sheets for tasks not covered by existing sheets.</p> <p>IPI Form 008 is a list/Index of the standard Trade and Activity Control Sheets available.</p> | <p>Yes</p> | <p>IPI Form 007</p> |
| <p>5.3 Project Site Meeting</p> <p>Regular site meetings attended by the Contractor and UNOPS (and when applicable the Consultants, Donors and Beneficiary) is a vital communication, monitoring and planning forum for the project. Meetings should be scheduled to meet project specific requirements.</p> <p>Crucial issues such as progress next to programme, resourcing, quality, environmental and health & safety matters, coordination, administrative and financial requirements are regularly discussed and reviewed with appropriate points of action moving forward defined.</p> | <p>Yes</p> | <p>IPI Forms 008</p> |

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| <p>IPI Form 008A is a suggested Project Site Meeting Agenda for use.</p> | | |
| <p>5.4 Site Daily Report</p> <p>The project daily diary is an important element in recording site activities. Informative daily/shift diaries are required for the duration of the contract.</p> <p>The diary is a record of what has taken place on site and is an important reference for the future. It is a clear and concise written report confirming what operations have been undertaken on site, by whom and what has affected production and why.</p> <p>IPI Form 008B is a template Site Daily Report format for use.</p> | <p>Yes</p> | <p>IPI Form 008A</p> |
| <p>6. Non Conformance, Complaints and Lessons Learned</p> | | |
| <p>6.1 Non Conformance</p> <p>Where a product, work or service on the project fails to meet specified and/or industry standard requirements the UNOPS non-conformance procedure will be used. Details of the non-conformance are to be recorded so notice can be given to the concern parties that a non-conformance has occurred and that remedial work is required to be undertaken.</p> | <p>Yes</p> | <p>IPI Form 008B</p> |
| <p>IPI Form 009 “Non Conformance Report” is to be used as a recording, reporting and control document for communicating the Non Conformance and the process of rectification.</p> | <p>Yes</p> | <p>IPI Form 009</p> |
| <p>IPI Form 010 “Non Conformance Register” can be used as a summary record and log of all project non conformances raised. The register facilitates reporting and simple analysis of non conformance issues.</p> | | |
| <p>6.2 Complaints</p> <p>A complaint report and register system is to be used to record, investigate and respond to any formal complaints received regarding the project activities. IPI Form 011 and 012 are to be used to process complaints.</p> | <p>Yes</p> | <p>IPI Form 010</p> |
| <p>6.3 Lessons Learned</p> <p>Any significant issue or event that required remedial or corrective action on the project is to be recorded and reported for the purpose of eliminating reoccurrence in the future on other UNOPS projects. Along with lessons learned, any suggested improvements to the UNOPS infrastructure project implementation process should also be detailed and recorded as part of the Lessons Learned process.</p> <p>IPI Form 013 “Lesson Learned Report” is to be completed and forwarded to the UNOPS Infrastructure Practice Lead for review, collation and action as required.</p> | <p>Yes</p> | <p>IPI Form 011 & 012</p> |
| <p>7. Completion Procedures</p> | | |

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| <p>As the infrastructure works near completion on the project various Taking Over requirements such as inspections, testing, defects management and submittals require processing and collation. The control documents in this section can be used to assist in ensuring the terms and conditions for Taking Over in accordance with the contract are verified as complete and have been executed to the required standard.</p> <p>7.1 Taking Over/Substantial Completion Inspections</p> <p>The Contractor in accordance with the form of Contract will notify UNOPS that the works are ready for inspection as part of the works completion process. The “General Taking Over Inspection” form and/or the “Room Taking Over Inspection” form can be used to assist and record this inspection process (see IPI Form 014 and 015).</p> | Yes | IPI Form 013 |
| <p>7.2 Contractors Submittals</p> <p>Nearing completion of the works the Contractor is required to submit various technical documentation including as-built drawings, operational manuals, spares and guarantees/warranties as detailed within the Contract. To assist in identifying, monitoring and recording the submission and approval of the required submittals, IPI Form 016 can be used as a register for this process.</p> | Yes | IPI Form 014 & 015 |
| <p>7.3 Contractor Completion Checklist</p> <p>A Contractor Completion Checklist can be used to ensure the various documentation, submittal and close out activities and issues are planned for and addressed (IPI Form 017)</p> | Yes | IPI Form 016 |
| <p>7.4 Defects Liability Period</p> <p>It is important that a procedure is established for managing defect notification and carrying out repair works during the contract defects Liability period. Clear lines of communication between the End User, UNOPS and the Contractor are required for any defect notification and protocol for access to carry out investigation, remedial and inspection of repaired works will need establishing.</p> <p>The “Defects Liability Period Defects Register” (IPI Form 018) allows for monitoring and tracking of defects through the Liability period.</p> | Yes | IPI Form 017 |
| <p>8. Document Control</p> <p>All project documentation and correspondence is required to be part of a document management plan in terms of referencing, logging, filing, tracking and archiving. UNOPS does not currently operate a fully integrated electronic document creation, distribution and filing/archive system, however the procedures outlined in this section represent the various document control measures within the organisation at present for project use.</p> | Yes | IPI Form 018 |
| <p>8.1 Project Document Centre</p> | | |

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| <p>In response to various UNOPS Organisational Directives (OD's), the Project Document Centre is an archiving tool which holds the UNOPS Project "Blue File". The required documentation to be uploaded and stored on the Blue File system is generally the wider project documents relating to the overall project proposal, negotiation, award, planning and reporting in terms of donor liaison and internal UNOPS requirements. Largely the detailed project specific infrastructure documentation is not part of the current Blue File system and will require its own project specific management, control and archiving.</p> <p>The UNOPS Project Management Practice has set of standard document templates covering the wider project management documents in terms of donor liaison and internal requirements. These templates should be reviewed and incorporated into the project as applicable.</p> <p>8.2 Contract Notices</p> <p>UNOPS has an extensive library of standard notices and letters relating to specific clauses and obligations detailed within the various forms of UNOPS Construction Contracts.</p> <p>The standard notices and letters are available online for the UNOPS team to use as applicable to the project.</p> <p>8.3 Standard Forms and Templates</p> <p>Standard forms and templates within the Health & Safety, Environmental Management and Project Implementation manuals are available for use as applicable to the project.</p> <p>8.4 Documentation Control Plan</p> <p>IPI Form 019 "Project Document Control Plan" is available as a template to organise and establish the specific document control system for the project.</p> | <p>Yes</p> | <p>IPI Form 019</p> |
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(FORMS SHALL BE USED DURING ACTUAL IMPLEMENTATION)