**QUALITY CONTROL PLAN**

***This example of QC Plan is designed mainly for the inspection of Goods. For Services, the QC Plan would usually be simpler, focusing on confirming key deliverables (reports, milestones…). For Works, the QC Plan would usually be more specific to the construction sector to confirm the quality of the Work. Please contact the Senior Director of Global Procurement and the Infrastructure team for more information on QC Plan for Work.***

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| **PR/MAR #: PR AMB 005** | **Tender #: AMB-RFP-005** |
| **PR/MAR Description: PLTS Refurbishment on Tiga Island** |

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| ***A QC Plan should detail the procedures to inspect and determine the acceptability of the goods, services, and works received.******The Originator is responsible for submitting the initial Quality Control Plan (QC Plan) with the Purchase Request (PR) and the Tender Initiation Request, for all High-Value Tenders (USD $150,000 and greater) -See section 5.16 of the FP3.*** |

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| Essential Specifications and Testing RequirementsPV Module (Goods)

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| **Parameter** | **Target Value** | **Margin of Error** (Absolute or Relative)[[1]](#footnote-1)  | **Testing Method**(Lab Test, Visual, Certificate...)  | **Performed / Reviewed by:**  |
| Power Output (Wp) | 410 | - 3% | Visual (Label) | QC Team |
| Temperature de rating Coefficient maximum (%) | 0,4 | N/A | Visual (Label) | QC Team |
| Minimum Efficiency(%) | 20 | N/A | Visual (Label) | QC Team |
| Nominal Output warranty after 10 years(%) | 90 | N/A | Visual (Label) | QC Team |
| Nominal Output warranty after 25 years(%) | 80 | N/A | Visual (Label) | QC Team |
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| Number of Module Strings |  |  |  |  |

PV Module Mounting (Goods)

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| **Parameter** | **Target Value** | **Margin of Error** (Absolute or Relative)  | **Test** (Lab, Visual, Certificate...)  | **Performed / Reviewed by:**  |
| Tilt Oriented | 10 | NA | LabTest | QC Team |
| Minimum Designed Wind Gusts (m/s) | 32 | NA | Lab Test | QC Team |
| Maksimum Self shading losses (%) | 2,5 | NA | Simulation Report | QC Team |

PV Inverter (Goods)

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| **Parameter** | **Target Value** | **Margin of Error** (Absolute or Relative)  | **Test** (Lab, Visual, Certificate...)  | **Performed / Reviewed by:**  |
| Minimum Quantity  | 2 | NA | Visual (Label) | QC Team |
| Minimum Efficiency (%) | 97 | NA | Visual (Label) | QC Team |
| Minimum Protection rating | IP 65 | NA | Certificate | QC Team |
| Minimum Stardard Warranty (Years) | 5 | NA | Certificate | QC Team |

Battery Inverter (Goods)

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| **Parameter** | **Target Value** | **Margin of Error** (Absolute or Relative)  | **Test** (Lab, Visual, Certificate...)  | **Performed / Reviewed by:**  |
| Minimum installed Capacity (kW)  | 30 | NA | Visual (Label) | QC Team |
| Minimum peak Capacity (kW) | 50 | NA | Visual (Label) | QC Team |
| Minimum Efficiency (%) | 94 | NA | Visual (Label) | QC Team |
| Minimum Quantity | 2 | NA | Visual (Label) | QC Team |
| Minimum Stardard Warranty (Years) | 5 | NA | Certificate | QC Team |

Battery Energy Storage System (Goods)

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| **Parameter** | **Target Value** | **Margin of Error** (Absolute or Relative)  | **Test** (Lab, Visual, Certificate...)  | **Performed / Reviewed by:**  |
| Chemistry | LI-Ion | NA | Visual (Label) | QC Team |
| Minimum installed Capacity (kW)  | 30 | NA | Visual (Label) | QC Team |
| Minimum peak Capacity (kW) | 50 | NA | Visual (Label) | QC Team |
| Round Trip Efficiency (%) | 85 | NA | Visual (Label) | QC Team |
| Maximum Self discharge related to capacity(%) | 5 | NA | Visual (Label) | QC Team |
| Minimum retain capacity after 10 years (%) | 60 | NA | Certificate | QC Team |
| Minimum Standard Warranty (Years) | 10 | NA | Certificate | QC Team |

Diesel Generator (Goods)

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| **Parameter** | **Target Value** | **Margin of Error** (Absolute or Relative)  | **Test** (Lab, Visual, Certificate...)  | **Performed / Reviewed by:**  |
| Power Output (kW) | 20 | +- 5% | Visual (Label) | QC Team |
| Voltage (V)  | 400 | +- 5% | Visual (Label) | QC Team |
| Frequency (hz) | 50 | +- 1% | Visual (Label) | QC Team |
| Rated Speed (rpm) | 1500 | NA | Visual (Label) | QC Team |
| Fuel Tank capacity (litre) | 500 | NA | Visual (Label) | QC Team |

Genset Controller (Goods)

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| **Parameter** | **Target Value** | **Margin of Error** (Absolute or Relative)  | **Test** (Lab, Visual, Certificate...)  | **Performed / Reviewed by:**  |
| Reputable Brand | ComAp | NA | Visual (Label) | QC Team |

Example: Engineering,Procurement & Construction (Service)

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| **Parameter** | **Target Value** | **Margin of Error** (Absolute or Relative)  | **Testing Method**(Lab, Visual, Certificate…)  | **Performed / Reviewed by:**  |
| ISO 14001 | N/A | N/A | Certification | Originator |
| ISO 9001 | N/A | N/A | Certification | Originator |
| OHSAS 18001 | N/A | N/A | Certification | Originator |

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| Contract Testing Requirements* *For Goods,* ***describe the sampling size that will be inspected*** *(% or value), the frequency of the inspection (per truck, per shipment, per order…), and the percentage of the tested sampling that needs to fail for the entire order to be considered as non-conforming[[2]](#footnote-2).*
* *For Services, describe briefly how you plan to confirm the deliverables and the parameters for non-conformity.*
* *For Works, contact the Senior Director of Global Procurement and the Infrastructure Team for more guidance.*

*This can also be broken down into specific items if some items are simply more important than others. For example if food items are included in an order with NFIs, 100% of food items may need to pass or they are considered non-conforming, whereas it may only be 50% of the goods to be checked for NFIs. This information should be included as part of the tender.*Example: (Goods)

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| **Percent of goods to be tested -Sampling size-****(%)** | **Frequency** | **Percent of tested sampling that needs to fail for the entire order to be considered non-conforming****(%)** |
| 10% | Per order (PO) | 95% |

For details testing each components and services in Technical specifications as attachedSee “**Quality Control Inspection Form**” examples in Wiki (or DL) |

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| Non-Conformance* ***Define what to do in cases of non-conformance to agreed quality standards****. Any contractual penalties to be applied and the process to follow in case of potential disagreements with the vendor must be included in the contract. There needs to be clear procedures on how to handle sub-standard goods, services, works, and item substitutions (including penalties if applicable).*
* ***Update the Tender Initiation Request, the Tender Package and the sample contract*** *with the required non-conforming clauses in order for Mercy Corps to enforce the inspection processes and the impact for non-conforming items.*
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1. *A relative margin of error will be indicated as a percent (example: +-5%); an absolute margin of error will be indicated as a value (example: +- 5cm)* [↑](#footnote-ref-1)
2. *A non-conforming item (or deliverable) is an item (or deliverable) that fails to meet the agreed quality standards (per contractual agreement)* [↑](#footnote-ref-2)