#### **Solomon Islands Government**



# Information & Communication Technology (ICT) Minimum Procurement Standards 1st October 2019 (Validity 3 months)

The following minimum ICT standards have been introduced to assist the Solomon Island Government Ministries and Departments in procuring ICT equipment. The standards will ensure that the equipment specifications are:

- ✓ Technically complete and complied
- ✓ Fit for Purpose
- ✓ Sustainable over the estimated lifetime of the equipment
- ✓ Maintainable over the estimated lifetime of the equipment

Please contact the Information Communications Technology Support Unit (ICTSU) on 24580/27668 or email it@sig.gov.sb if queries regarding these minimum ICT standards are needed.

#### **Important Notice**

Any vendors who deliver equipment, software or services that are non-compliant with these minimum standards three times (3) in a row will be excluded from the provision of any equipment, software or services to SIG for a minimum period of six (6) months.

All equipment and software delivery for SIG must be done through the ICT Support Unit office which is located at **Lengakiki**, for auditing and tagging against a checklist refer (Page 11). Vendors must also note that the release of any payment is determined by full delivery in compliance with these standards and specifications.

Any New vendors who wish to provide ICT related services to SIG must fill in the SIG ICT technical specification form. This form can be obtained from ICTSU office at Lengakiki, the provision of providing ICT equipment, software or services to SIG can be granted upon satisfactory of information provided in this form. Copy of this form is found on page 13 of this document.

#### 1) Generic Standards.

- 1.1. All ICT equipment must be provided with a suitable Hardware Maintenance Contract that includes 3-year ON-SITE hardware and labour maintenance (a warranty is not considered adequate). The maintenance contract is to guarantee the repair or replacement of all faulty hardware within 5 working days of the fault being reported to the vendor. The initial inspection and fault diagnosis is to be carried out within 1 working day.
- 1.2. All motherboard/Hardware Drivers must be installed.
- 1.3. All software product Keys, Documentation and media MUST be surrendered to SIG ICTSU office, at Lengakiki.
- 1.4. SIG will accept only <u>BRAND NEW</u> equipment. All desktops and laptops supplied must be NEW (refurbished or second-hand computers will not be accepted).
- 1.5. ALL hardware drivers and application software must have 64bit versions supplied.

#### 2) Desktops.

- 2.1 Hardware Minimum Technical Standard Specification
  - Minimum i5 Processor or latest CPU
  - Minimum 4GB of RAM
  - Minimum 500GB Hard disk
  - 240V ATX Power supply unit
  - Minimum 1GigMbps network card
  - UPS (min.650VA) with surge protection
  - Accessories
- 2.2 Minimum Software Requirements for Desktops.
  - Factory pre-installed Windows 7 or 10

#### 3) Monitors.

- Minimum 21" LCD
- 240V Power rating.

#### 4) All-In-One Desktop

- 4.1 Hardware Minimum Technical Standard Specification
  - Minimum i5 Processor or latest CPU
  - Minimum 4GB of RAM
  - Minimum 512 GB M.2 [PCIe] x4 (SSD)
  - Minimum 1GigMbps network card
  - UPS (min.650VA) with surge protection
  - Accessories

#### 5) Laptops.

- 5.1 Hardware Minimum Technical Standard Specification
  - Minimum i5 Processor or latest CPU
  - Minimum 4GB RAM.
  - Minimum 500GB Hard disk or Minimum 500GB SSD
  - 1Gb network adapter
  - Integrated 802.11 b/g/n/a wireless adapters
  - 240V surge protection device
  - Accessories
- 5.2 Minimum Software Requirements for Laptops;
  - Factory pre-installed Windows 7 or 10

#### 6) Servers.

This component is no longer included.

#### 7) Photocopier.

All photocopy requirements must have an option to be connected to a network.

Please contact the ICTSU for advice when procuring photocopying equipment.

#### 8) Printers.

All printers must have an inbuilt Ethernet network interface card. *Printers purchased for SIG Provincial offices MUST have inbuilt 1 Gabs Ethernet network interface*. Please consult ICT SU for any queries.

Note: Toner printers are strongly recommended for purchase because of its long term economic value.

#### 7.1 Mid-range black and white printer

Minimum technical specification:

- Ethernet-enabled
- Black toner only
- Duty Cycle less than 20,000 pages per month
- No scanning functions
- Includes a duplex unit
- No photocopy function

#### 7.2 Mid-range Multifunction (Printer, Copier, Scanner)

Minimum technical specification: Ethernet enabled

- Black toner only
- Duty Cycle greater than 20,000 pages per month
- Scan to e-mail and file share. Multi-page scan.
- Output to jpg and pdf format
- Includes a duplex unit
- With Photocopying functionality
- Ethernet-enabled

#### 7.3 Mid-Range Color printer

Minimum technical specification: Ethernet enabled

- Duty Cycle less than 20,000 pages per month
- No scanning functions
- Includes a duplex unit
- No photocopy function
- Ethernet enabled

#### 9) Software Development.

#### 8.1 Requirement Specs:

Any Ministry requiring software development is to develop a comprehensive set of functional requirements specifications to be included in the request for quotation (RFQ) or request for tender (RFT). The ICTSU can provide advice on how to develop a set of functional requirements, on request.

#### 8.2 Acceptance testing:

Any Ministry requiring software development is to develop a set of acceptance tests prior to acceptance testing. The ICTSU can provide advice on how to develop acceptance tests, on request. After the tests are done the developer must provide the documentation, user guide and training for the user.

#### 8.3 Payments for software development:

Any software development contract or agreement made should be fixed price basis and payments are to be made based on pre-determined agreed deliverables.

Before the final payment is made the developer must hand over all the intellectual property and source code to SIG as well as the user guide and all other documentation.

Three (3) year on-site support and maintenance must be provided by the developer. The Ministry is to ensure that full user training is provided to all relevant SIG personnel by the developer prior to payment being made for the training.

#### 10) Software Purchase

Ministry wishes to purchase a new software must consult ICTSU for advice or awareness regarding the software functionalities, scalability, sustainability, license agreement type, and capability to centrally installed to void the proliferation of different applications that serve the same purpose.

#### 11) Networking Equipment

#### 11.1 Switch

All new network switches must be an Enterprise network managed layer 2/3 switches, only Cisco and Hewlett Packard (HPAruba) switches are acceptable on the SIG Network.

#### 11.2 Cabling System Works

The scope of work for the provision of carrying out structured cabling in the SIG offices includes supply, installation, testing, commissioning, labelling and documentation.

Installation shall only be carried out by Structured Cabling contractors who hold a valid Structured Cabling certification from a recognized institution. Network cabling firms who wish to bid for a cabling work in SIG offices must forward a copy of business registration, business licence and structured cabling certification to ICTSU for scrutiny and approval to be in preferred SIG structured cablers list.

Names of authorized cablers and their respective certification can be obtained from the SIG ICT Support Unit. SIG will only engage contractors who are certified to carry out structured CAT6 network cabling work.

All network cabling and cabling installation are to meet Category 6 standards fully.

The Do's and Don'ts are presented in attachment A to assist in achieving this aim. All data cabling installations are to be fully documented with data cabling diagrams that show the physical location of the cable runs within the building or between buildings.

Please contact the SIG ICT-SU for advice when procuring any networking equipment or cabling (LAN).

## See Attachment A: Category 6 Installation. Do's and Don'ts. Attachment A: Category 6 Installation. Do's and Don'ts.

Do	Run all cables in a "Star" configuration. That is to say that they all emanate from, and are "home run" to, one central location, known as the wiring hub. Visualize a wagon wheel, all of the spokes; start from one central point, known as the hub of the wheel.
Do	Keep all cable runs to a maximum of 90 meters (for each run).
Do	Maintain the twists of the pairs all the way to the point of termination, or no more than 1.3cm untwisted
Do Not	Skin off more than 2.5cm of the jacket when terminating
Do	Make gradual bends of the cable, where necessary. Radius No sharper than an SI 50 Cents coin.
Do Not	Allow the cable to be sharply bent, or kinked, at any time. This can cause permanent damage to the cables' interior.
Do	Dress the cables neatly with cable ties. Use low to moderate pressure.
Do Not	Over tighten cable ties. We recommend <u>Hook and Loop (Velcro) Cable Ties</u> for commercial installations.
Do	Cross-connect cables (where necessary), using cat 6 rated punch blocks and components.
Do Not	Splice or bridge category-6 cable at any point. There should never be multiple appearances of category 6 cable.
Do	Use low to moderate force when pulling cable.
Do Not	Use excessive force when pulling cable.
Do	Use <u>cable pulling lubricant</u> for cable runs that may otherwise require great force to install. (You will be amazed at what a difference the cable lubricant will make)
Do Not	Use oil, or any other lubricant, not specifically designed for cable pulling. Oil, or other lubricants, can infiltrate the cable, causing damage to the insulation.

Do	Keep cat6 cables as far away from potential sources of EMI (electrical cables, transformers, light fixtures, etc.) as possible
Do Not	Tie cables to electrical conduits, or run cables within or along an electrical conduit or lay cables on electrical fixtures.
Do	Install proper cable supports, spaced no more than 1.5 meters apart.
Do Not	Install cable that is supported by the ceiling tiles (this is unsafe, and is a violation of the building codes).
Do	Always <u>label every termination point.</u> Use a unique number for each cable segment. The idea here, is to make moves, adds, changes, and troubleshooting as simple as possible.
Do	Always test every installed segment with a <u>cable tester</u> . "Toning" alone, is not an acceptable test.
Do	Always install jacks in such a way as to prevent dust and other contaminants from settling on the contacts. The contacts (pins) of the jack should face up on flush mounted plates, or left, right, or down (never up) on surface mount boxes.
Do	Always leave extraa slack on the cables, neatly coiled up in the ceiling or nearest concealed place. It is recommended that you leave at least 1.5 meters at the work outlet side, and 3 meters at the patch panel (wiring hub) side.
Do Not	Never install cables "taught" in the ceiling, or elsewhere. A good installation should have the cables loose but never sagging.
Do	Always use grommets to protect the cable where passing through metal studs or anything that can possibly cause damage to them.
Do	Choose either 568A or 568B wiring standard, before you begin your project. Wire all <u>jacks</u> and <u>patch panels</u> for the same wiring scheme (A or B).
Do Not	Mix 568A and 568B wiring on the same installation.
Do Not (1 exception)	Use staples on category-6 cable that crimp the cable tightly. The common T-18 and T-25 cable staples are not recommended for category 6 cable. The <u>T-59 insulated</u> staple gun is ideal for fastening cat5 & 6 and fibre optic cabling as it does not put any
Do	Always obey all local, and national, fire and building codes. Be sure to "fire stop" all cables that penetrate a firewall. Use plenum rated cable where it is mandated.

Notes and Explanations for Do's and Don'ts

Ideally, the data extension cord install should smoothly pass the data, from one end to another without altering the signal (transmitted from device to device) in any way. Consider this fact to be Rule #1, and is perhaps the most important statement that we can make. There are many very technical issues concerning UTP cabling. No matter how technical, these issues all boil down to that one simple fact. You would probably need an Electrical engineering degree to fully understand all of the theories that go into transmitting data over UTP cabling. All that you need to know as an installer are the few simple facts, or do's and don'ts. It is no more complicated than that. Almost all of the rules (do's and don'ts) above are designed to adhere to Rule #1. The others are necessary to promote a neat, orderly, safe and professional installation.

#### Routing and ducting of cables

The requirements of this Clause are intended to minimize the induction of power and noise signals onto data communication and telecommunication cables, which could result in data corruption.

Data communication and telecommunication cables shall be routed in relation to power cables (for computer equipment, lighting, air-conditioning or any other purpose) or related equipment, to avoid induced interference. The guide for achieving this is set out as follows:

(a) The minimum separation distance between such cables or their related equipment shall be no less than the distances given in Table 3.1.

Table 3.1 Separation Between power and Data cable.

Criteria	Unshielded Power	Shielded Power
Ratio	Cabl	Cables
		_
	300	25
≤1	400	50
>1 ≤2	650	150

Where it is necessary for power and data communication cables to cross, they may do so at less than the above-required distance provided that the maximum available separation is observed and that the cables cross only at right-angles, with straight sections on each side of the crossing point. The minimum straight length shall be the difference between the appropriate distances listed above and the distance between the two cables at crossover.

(b) Data communication cables shall not be laid in the same duct as power or other conductors, as specified above, with less than the above separation unless electrically separated by a screen which is connected to the safety earth system.

NOTE: Routing one group or the other through a metal conduit, earthed asspecified, will satisfy this requirement.



#### SOLOMON ISLANDS COVERNMENT

ICT Support Unit Ministry of Finance & Treasury **PO Box 26** Honiara, Solomon Islands

Phone: (677) 24580/24575

GOVERNMENT							
October 7, 2019							
STANDARD SIG ICT PURCHASE CHECKLIST (To be completed before Payment)							
Requisition NO: IT Supplier: Ministry: Department: SIG Audit: Quote Validation:							
Scanned Document Name:	Hard Cat Asset No:	Item type:	Item cost:	Preferred supplier:			
AUDIT CHECK.			dit Location: lit Date: /	1			
Task: Audit Checklist				Status:	 r ⊠		
Supply matches the specifica	tion on the quote suppl	ied by the pref	ferred supplier				
for Hardware Supply matches the specification	ution on the quote sunnl	ind by the prof	Formad cumplion	,			
for software.	mon on the quote suppl	ied by the prei	erred supplier				
Asset Tags/Label #							
Comments/Remarks:							
Order is: (Please circle)							
COMPLETE INCOM		IPLETE					
Please Proceed with payment Please volume Auditing Staff:		vithhold payme	ent.	Stamp	7		
Name:					J		
Authorising Manager:							
Name:							

#### **COVER SHEET SUPPLIER INFORMATION FORM**

#### Request for Supply of IT Equipment to SIG

Dated thisSignature	day of 20  In the capacity of
Dated this	day of
Signature of Supplier's A	Authorised Officer
<b>Telephone of Contact:</b>	( )
<b>Email of Contact:</b>	
Position of Contact:	
Name of Contact:	
Address:	
Name of Supplier: Address:	

### (INSERT COMPANY STAMP)

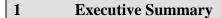
#### Note to Supplier:

- 1. Suppliers shall provide a Cover Sheet in the above format.
- 2. The Contact Person shall be a person who is easily contactable via telephone, facsimile or e-mail to answer queries in relation to the supply of ICT goods on a day-to-day basis.

Suppliers shall provide the information outlined below.

Details of Supplier				
Full legal name:				
Trading or business Name:				
Tax Identification Number:				
Address:				
If a company (in addition to	the above)			
Date and place of incorporation:				
Individual shareholders holding 20% or more of any issued share capital of the Bidder:				

Note: ICT supplier shall provide a copy of their Company Registration Certificate or Business Name Registration Certificate. Failure to provide any of the requested documents will render the quote invalid



ICT supplier shall provide a brief Executive Summary of their business.

#### 2 Ability and Capacity to Supply Whole of Government

ICT supplier shall provide details of the organization's ability and capacity to supply the goods or services to the whole of government.

ICT supplier shall also provide details of its business including:

- a. Number of employees;
- b. Names and experience of key personnel;
- c. Details of any shop fronts operated including the location and length of operation in this location.

#### 3 Relevant experience

ICT supplier shall provide details of past and current customers to whom similar goods or service have been provided (eg. including names of customers, contract values etc)