Technology Certification Process

Version: 4.0

Date: 2022-03-29

Notice

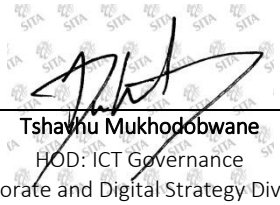
Copyright © 2022, SITA SOC Ltd (Registration No: 1999/001899/30). All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means without the express written permission of SITA SOC Ltd.

Document enquiries may be directed to:
Records Management Office
SITA SOC Ltd
PO Box 26100, Monument Park, 0105, South Africa
Tel: +27 12 482 3000
www.sita.co.za

Technology Certification Process
Document No: **eNSQS-00144**
Version: **4.0**
Author: **Izak de Villiers**, izak.devilliers@sita.co.za, +27 12 482 3000

Approval

The signatories hereof, being duly authorised thereto, by their signatures, hereto authorise the execution of the work detailed herein, or confirm their acceptance of the contents hereof and authorise the implementation/adoption thereof, as the case may be, for and on behalf of the parties represented by them.



30/03/2022

Tshavhu Mukhodobwane
Date
HOD: ICT Governance
Corporate and Digital Strategy Division

29/3/2022

Deon Nel
Date
Consultant: Technology Advisory Services

29/3/2022

Izak de Villiers
Date
Consultant: Technology Advisory Services

Contents

1. Introduction 5
1.1 Aim 5
1.2 Scope: Technology domains 5
1.3 Exclusions 7
1.4 References 7
1.5 TAS functional structure 8
2. Definitions and process framework 8
2.1 OEM Memorandum of Agreement 9
2.2 Technology certification 9
2.3 Technology updates (TU) 9
2.4 Research 10
2.5 Information sharing and collaboration 10
2.6 Technology advice 10
3. Technology Certification Process (TCP) 10
3.1 OEM Memorandum of Agreement 11
3.2 Technology certification 12
3.3 Tech Lab processes 14
3.4 Development and Update of Specifications 17
3.5 Technology research 19
3.6 Information sharing and collaboration 19
3.7 Technology advice 20
4. General rules and guidelines 20
5. Conclusion 21
Annex A: Product Certificate sample 22
Annex B: Certified Product Database 23
Annex C: OEM Database 24
Annex D: OEM process diagram 25
Annex E: Processes diagrams, roles and responsibilities 26
Annex F: Product certification checklist 27
Annex G: MoA checklist 28
Annex H: Demo Equipment Control 29
Annex I: Contact details 30
Annex J: Abbreviations, Terms and Definitions 31
A.1 Abbreviations 31
A.2 Terms and Definitions 31

Tables

Table 1: Technology domains within the TCP 6
Table 2: Technology certification roles and responsibilities 13
Table 3: Certification Database fields 15
Table 4: TU roles and responsibilities 18

Table 5: TAS contact details 30

Figures

Figure 1: e-Government House of Value 5
Figure 2: Certified technology domains and transversal/period contracts 7
Figure 3: TAS functional structure and processes 8
Figure 4: TAS processes and interactions 11
Figure 5: MoA Applicability 11
Figure 6: Requirements for supply to Government 21
Figure 7: OEM product certification process diagram 25
Figure 8: Product certification process 26
Figure 9: Tech update process 26

1. Introduction

Technology Advisory Services (TAS) was created to provide a consulting service to SITA and Government, and to support the SITA Act mandate in terms of certifying ICT goods and services.

In terms of the SITA Act and Regulations, and National Treasury Practice Note 5 of 2009, "SITA must conduct a standard certification in respect of ICT goods and/or services before finalising a list of prospective suppliers".

In addition to the above legal framework, the Public Service Regulations of 2016 state that any new ICT system or any upgrade of an existing system in the public service shall comply with the Minimum Interoperability Standards (MIOS).

National Treasury's Performance Information Handbook (April 2011) states the following about MIOS: The Minimum Interoperability Standards released by DPSA and set by State Information Technology Agency (SITA) provide government's technical principles and standards for achieving interoperability and information systems coherence across the public sector. These standards are mandatory and apply at a minimum to any ICT system development.

MIOS standards are developed in conjunction and collaboration with prescribed GITO Council structures, namely the Standing Committee on IT Service Management (SC-ITSM) and its sub-committee, the Technical Task Team (TTT).

To support these mandates, SITA has established a **Technology Certification Process** (TCP) to allow OEMs to submit their products and solutions for certification. The TCP is implemented to support current and new Government transversal contracts or other procurement processes (RFB/RFP/RFQ/RFA) issued by Government, but is separate from these bid processes.

In addition to system development, any Government bids/tenders for ICT products or solutions also require certification by SITA, whether procurement is via transversal contracts or alternative vehicles prescribed by National Treasury and SITA regulations. Technology certification as described in this process document is done solely in conjunction with **OEMs** (technology manufacturers).

1.1 Aim

The primary goal of the TCP is to support Government's objective to roll out standards-based, cost-effective, high-quality solutions within Government, fulfilling the requirements of the e-Government House of Value.

The certification process is conducted on a continuous basis, is open to **all** participants, and does not exclude any OEMs or products. The TCP incorporates new technologies, OEMs, products or categories as and when they enter the market – provided there is a documented requirement for these within Government. All that is required to participate is for an OEM to submit a request with the required documentation.

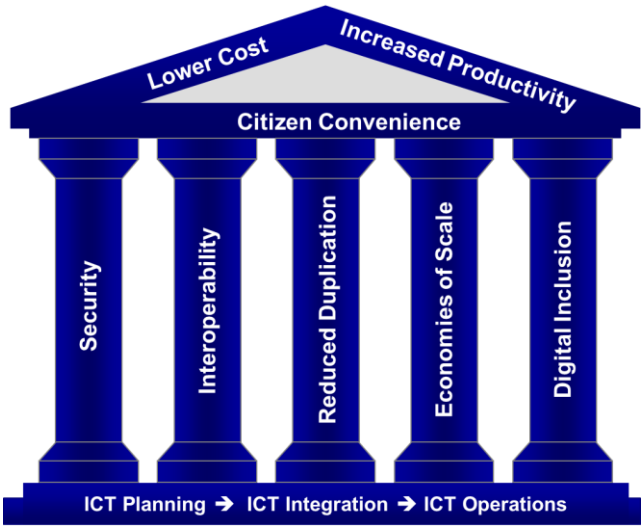


Figure 1: e-Government House of Value

1.2 Scope: Technology domains

A Memorandum of Agreement (MoA) provides the basis of a working relationship between SITA and registered OEMs to support the Technology Certification Process, whereby SITA certifies technology for

adherence to Government standards prior to procurement by Departments. The MoA only applies to manufacturers that represent a product brand sold to the SA Government, and that also fits into one of the identified technology domains. These domains include, but are not restricted to, the following:

Domain	Components
Personal Computing Devices	Desktop PCs, Mobile PCs, Desktop displays, Mobile devices (Tablets, Smartphones, Industrial handhelds), Accessories and Device Management.
Peripherals	Printers, Multifunction devices, Scanners, Digital cameras, Automatic Data Capture (Barcoding, Card devices), Biometric readers, Optical storage (DVD duplicators), Consumables and Print management.
Assistive Technologies	Assistive devices and software for people with disabilities, including smart devices (tablets, PDAs, readers, media players, recorders and braille devices), peripherals (input and output devices) , assistive software enabling access and speech (AAC), and skills development and learning aids for users with disabilities.
Education Solutions	Classroom solutions, including PCs, laptops, tablets, presentation and teaching devices, Classroom infrastructure and systems (hardware and software), and e-Sports systems
Audiovisual Communications (AVC) Technologies	Video and audio conferencing, large-format display devices (projectors, monitors, interactive displays and display walls), collaboration, media recording, speech processing, and AV signal control and management.
Surveillance & Access Control (SAC)	Fixed and mobile surveillance and physical access control solutions, including IP cameras, mobile cameras, UAVs, storage and recording devices, video management systems and control room solutions
Servers & Storage	Servers (Rack-mount, Tower, Blade), Primary and Secondary storage (Disk to Disk, Tape and Archiving).
Networking	LAN, WLAN and WAN equipment, Wireless backhaul, and Structured cabling (copper and fibre-optic).
Infrastructure	UPS, Equipment Racks, Alternative power, Cable ducting, trenching and routing.
Cybersecurity	Cybersecurity products and solutions (ISS – information system security)

Table 1: Technology domains within the TCP

Additional technology domains will be incorporated in the scope as and when identified by SITA or required by the client.

Technology categories and sub-categories within each domain are defined in the respective detail technical specifications that can be downloaded from the SITA website at www.sita.co.za/prodcert.htm.

The diagram below indicates with a © symbol the technology domains currently covered by the certification process. Relevant procurement contracts are indicated and defined for reference.

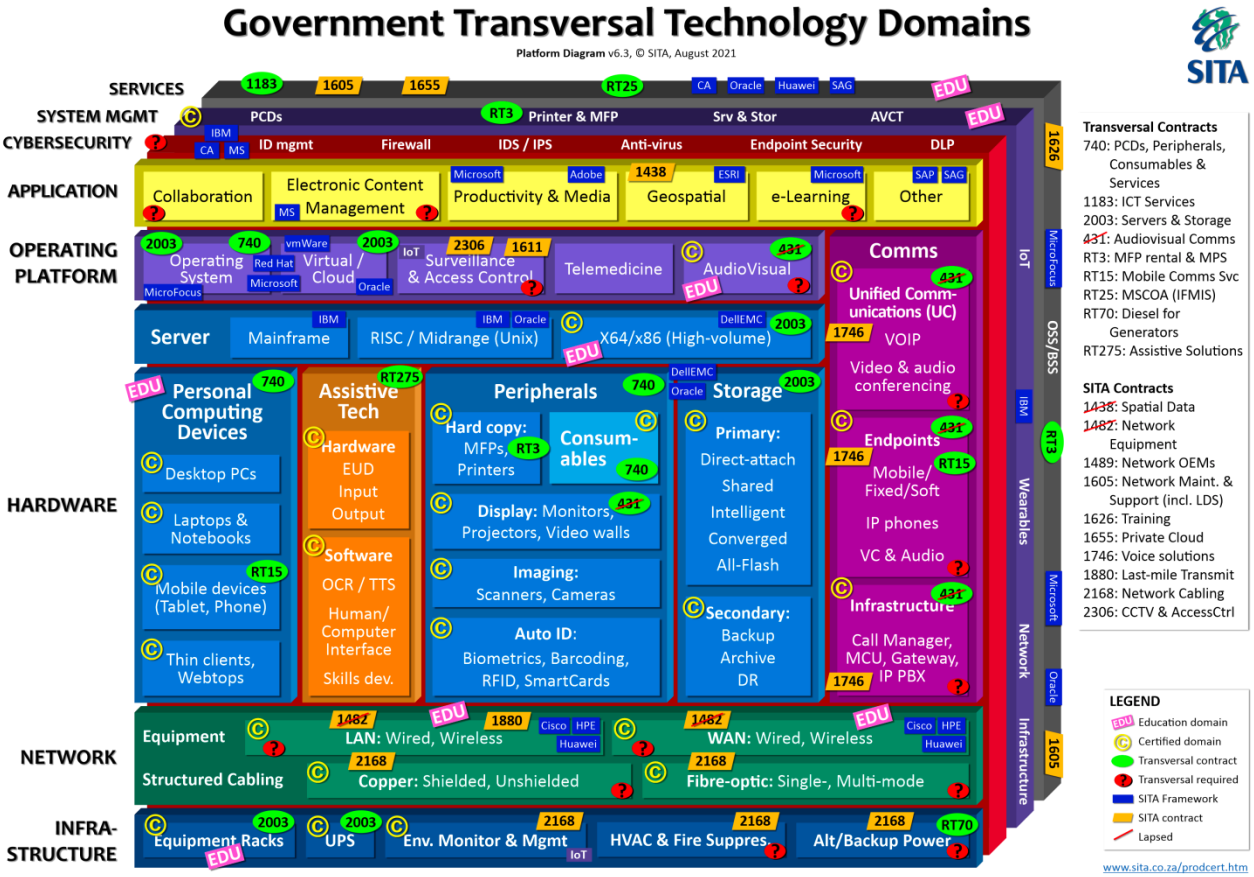


Figure 2: Certified technology domains and transversal/period contracts

1.3 Exclusions

The Technology Certification Process specifically excludes the following functions:

1) SITA SCM processes and related requirements (e.g. tax status of OEMs)
2) National Treasury procurement processes and related documents (e.g. Central Supplier Database)
3) Price and/or contract negotiations
4) NIPP, SMME, BEE and other related requirements
5) OEM and reseller agreements between SITA SCM and industry
6) Distribution or supplier agreements between OEM representatives and their partners

1.4 References

1) The Constitution of R.S.A., Act 108 of 1996
2) Public Finance Management Act (PFMA), Act 1 of 1999
3) State Information Technology Agency Act (Act 88 of 1998), as amended
4) SITA Regulations, 23 September 2005
5) National Treasury Practice Note no. 5 of 2009

6) Minimum Interoperability Standards: www.sita.co.za/content/minimum-interoperability-standards

7) Minimum Information Security Standards: www.sita.co.za/content/minimum-information-security-standards

8) SITA Technology Certification: OEM Memorandum of Agreement (MoA) (latest version at www.sita.co.za/prodcert.htm)

9) Technical specifications for technology domains: SITA Technology Certification website www.sita.co.za/prodcert.htm

10) Latest versions of all related specifications, processes, documents and forms: www.sita.co.za/prodcert.htm

1.5 TAS functional structure

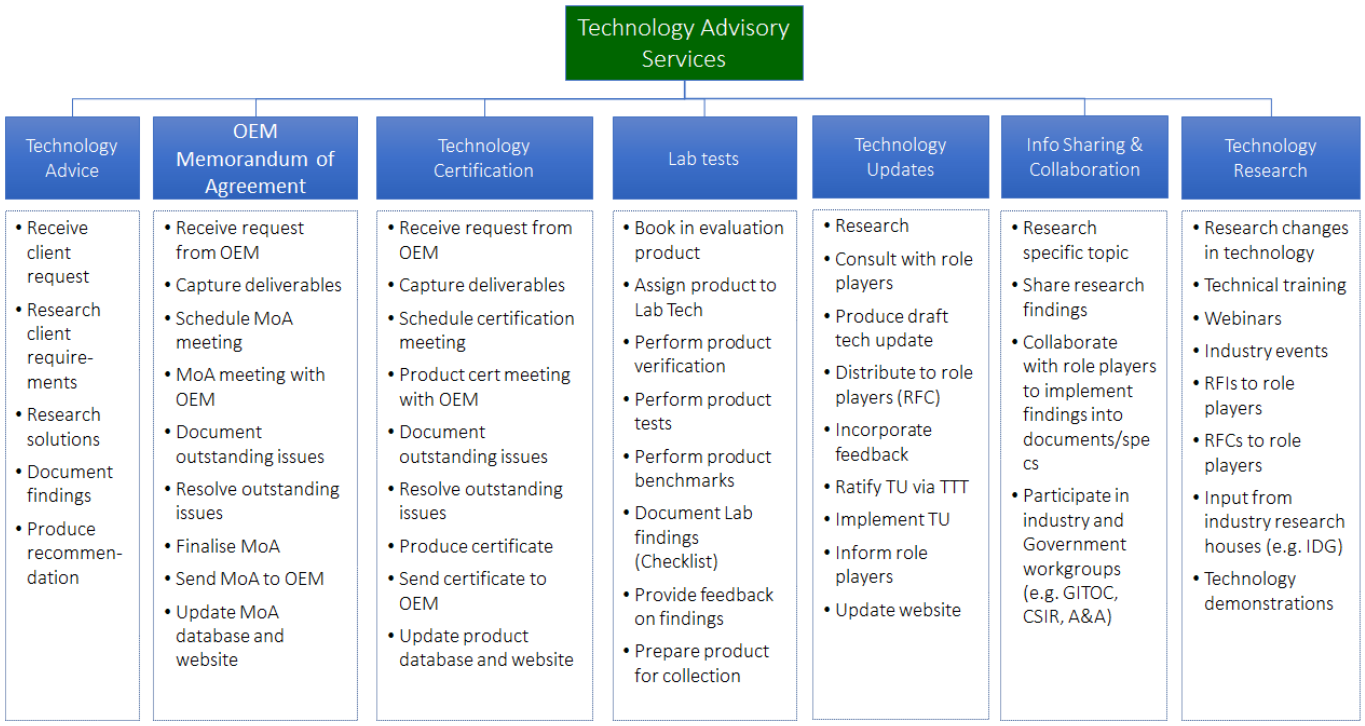


Figure 3: TAS functional structure and processes

2. Definitions and process framework

Technology certification comprises several mechanisms to keep technology standards current and maintain product and OEM databases, namely:

- Technology advice
- Technology certification
  - Memorandum of agreement
  - Product certification
  - Lab tests
- Technology updates
- Information sharing and collaboration
- Technology research

Due to the wide variation in the different technology domains, all product categories do not require the same certification processes or the same level of interaction, and these processes are applied to individual domains as appropriate.

Below is a brief overview of the different processes within the TCP, including OEM agreements, updates to the technology specifications and maintenance of the Certified Product Database.

2.1 OEM Memorandum of Agreement

To enable the technology certification process, a formal relationship must first be established between SITA and the OEM via a Memorandum of Agreement, which must be completed and submitted by the OEM. The MoA provides a standard agreed-upon service and technology platform across all technology domains across all manufacturers and suppliers.

The MoA must be concluded before any products may be certified.

2.2 Technology certification

As required by the SITA Act and National Treasury regulations, all products and solutions supplied to Government must be certified. OEMs must submit products for certification along with all required information and other deliverables, after which TAS will conduct the certification process. Certified products are listed in a product database that is maintained by TAS and can be accessed from the SITA website by suppliers and clients.

The certification process itself is broken down into several sub-processes, including the following:

- OEM request
- Technical verification
- Management of test equipment
- Lab testing
- Certification of product
- Documentation

2.3 Technology updates (TU)

As Government's business requirements change, the technology solutions to address those needs must be adapted. SITA continually updates and extends the relevant technology domains (and the supporting technical specifications) to support the changing and expanding needs of its client base. The TU process is a tool used by TAS to document and communicate changes to the relevant domain specifications, including high-level and detail documents.

Technology updates address changes such as processor specs, storage and memory capacities, display quality, etc., as well as new iterations of industry standards from IEEE, ISO or industry bodies. These are general updates that apply to all affected products, irrespective of which product brand or model is offered. The frequency of tech updates will depend on how often the domain changes in general. More regular tech updates are applied to devices that have frequent changes of component specifications (e.g. PCs and mobile devices), while domains such as networking and Infrastructure will change less regularly. Other changes to the specifications are made as required.

The technology update process is initiated by SITA, compiled by TAS in consultation with Government technical representatives (including the GITOC TTT), subject matter experts and industry role players

(suppliers and OEMs). Tech updates are communicated to all role players via technical distribution lists which are maintained by TAS per technology domain.

In addition to expanding or updating existing technology domains, SITA will add additional domains to the certification process as required by the client. Technology categories (e.g. equipment racks) may be moved or duplicated between technology domains if required.

2.4 Research

Technology research is a vital part of the process to identify new technologies, adapt to changes in the industry, document new use cases, and update Government requirements and the resulting technical specifications.

2.5 Information sharing and collaboration

An important output of the technology research process is to share gathered information with industry and Government role players at forums such as the GITOC TTT as well as *ad hoc* events. Information sharing can take the form of a Research Report, sharing of an article or document, or a formal or informal presentation.

2.6 Technology advice

In addition to the specific task of certifying technology solutions, SITA TAS (Technology Advisory Services) also provides a consultation or advisory service to Government clients to aid Departments in specifying, procuring and deploying technology solutions. This service is typically rendered on an *ad hoc* basis, except where there is a project or agreement-based service requirement, in which case a more formal agreement guides the service.

3. Technology Certification Process (TCP)

This section describes the entire TCP in terms of the component processes that make up the combined structure. A process diagram for OEMs to follow is included in Annex C.

The diagram below illustrates the interactions between TAS services and processes, SITA SCM, the client, and industry (OEMs and their partners).

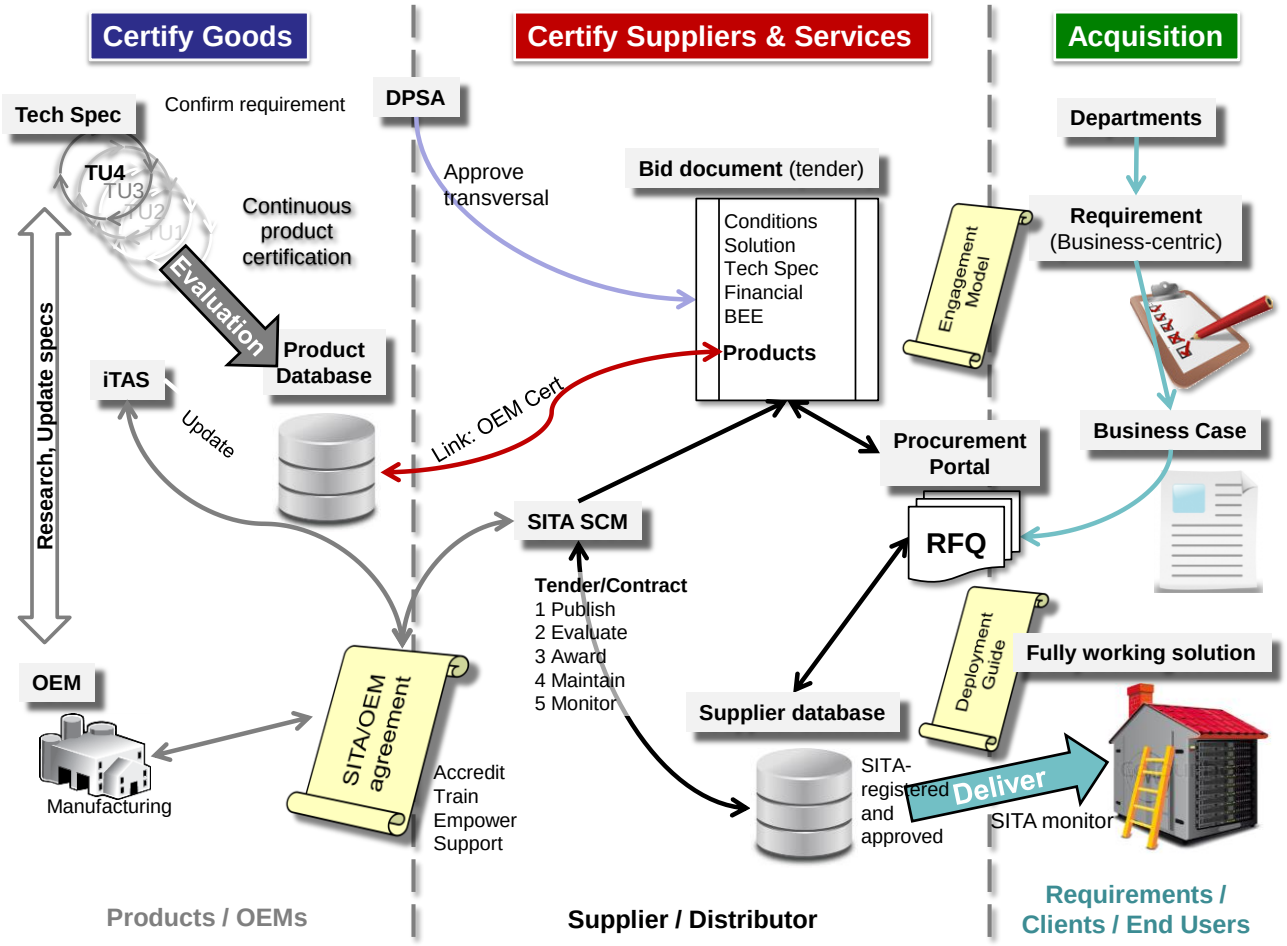


Figure 4: TAS processes and interactions

3.1 OEM Memorandum of Agreement

The first step in the TCP is the establishment of a formal working relationship between SITA and the OEM, in order to enable product certification. The MoA stipulates specific criteria and conditions in support of Government ICT goals, including quality, security, service and support. The MoA must be finalised before any products may be certified.

In the absence of a signed MoA, **no products will be certified** for that OEM. If an MoA lapses or is cancelled, any existing certified products will be removed from the product catalogue. Conversely, if no products are certified by the OEM for an extended period, the **MOA may be cancelled** at the discretion of SITA.

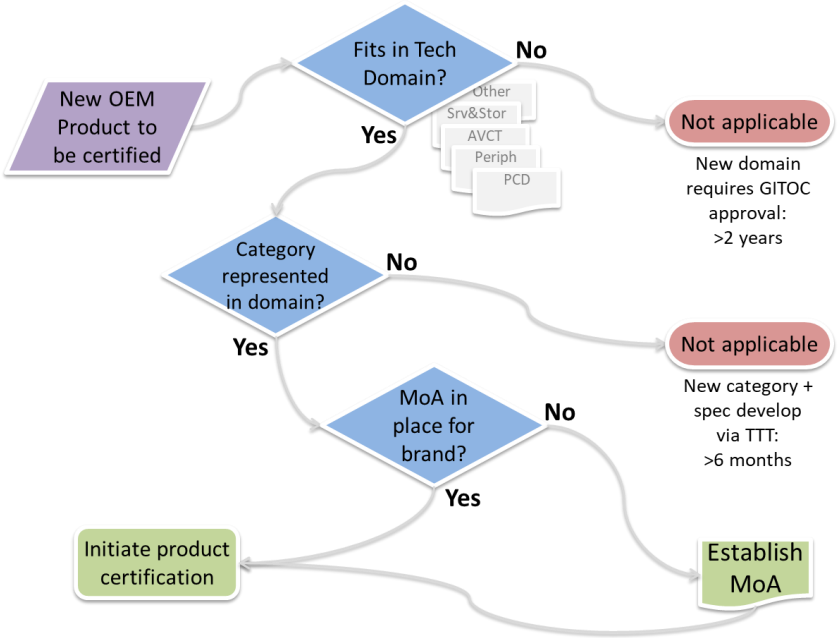


Figure 5: MoA Applicability

As shown in figure 4, an MoA can only be concluded if the OEM's products fall within one of the defined technology domains, as well as within a specific sub-category (i.e. a detail spec exists for this type of commodity). Products or solutions that have no associated category or specification within this structure cannot be certified until a standard has been established for this type of solution.

The process to conclude an MoA is as follows:

1. **OEM downloads** latest version of MoA document and OEM Checklist from the Product Certification website (www.sita.co.za/prodcert.htm).
2. **OEM completes** the MoA and OEM Checklist.
3. **OEM prepares deliverables** for the MoA process, compiling all required documentation (e.g. certificates, policies, letters).
4. **OEM submits** the MoA, Checklist and supporting documentation to TAS. A request is only considered valid and complete once **all** required deliverables have been submitted.
5. **TAS Coordinator schedules** an appointment to process the MoA, at which time all deliverables are examined for compliance.
6. Once all outstanding matters are addressed, **TAS concludes the MoA**. MoA turnaround time and availability of resources dictate that the MoA is signed electronically, with no direct interaction required by the certificate signatory.
7. **TAS updates the OEM database** with all relevant details regarding the OEM process.
8. A copy of the **MoA is sent to the OEM** for use in subsequent certification and tender processes as required.
9. **Update website:** the TAS Coordinator facilitates updates of the TCP website with new OEM information.

3.2 Technology certification

The technology certification process must be driven by the OEM, on behalf of all its partners who supply the product to Government.

1. **OEM downloads** the latest version of required forms, specifications and other information from the Product Certification website (www.sita.co.za/prodcert.htm).
2. **OEM prepares** all documentation and demo equipment (if required), along with a written application for certification. The format and contents of this application are addressed below, and TAS may be consulted if required. OEM must ensure that the product complies with all mandatory requirements as per the current technical specification. Products that do not comply with *all* specifications will not be certified.
3. **OEM submits** the request and all supporting documentation to TAS. Only once **all deliverables**, including documentation, certificates, formal request, etc. have been submitted, is this deemed to be a valid, complete request to be actioned.
4. **Product database updated**: TAS coordinator populates the relevant fields regarding the request, including OEM, category, dates, etc.
5. The **TAS Coordinator schedules** an evaluation appointment, at which time hard-copy deliverables must be submitted as per the Certification checklist. The technical resource that prepared the documentation must be present at the certification meeting to address any queries.
6. **OEM delivers the product** to be evaluated to the Technology Lab for testing. Product is booked in using the Product Control Sheet, with both SITA and OEM signatures.

7. As per the standard TAS evaluation process, **TAS verifies and evaluates** the new product against the current technical specification. Most of the verification process is done in the evaluation meeting with the OEM. Full compliance with all mandatory specifications and configurations is required, as well as a calculated TCO figure that is equal to or lower than that of the previous product (if applicable). If successful, the product is certified to be supplied to Government.
8. **TAS produces a certificate** to formalise the successful outcome of the process. Given process turnaround constraints, certificates are generated and signed electronically, with no direct interaction required by the certificate signatory.
9. TAS sends the certificate to the OEM, and **updates the product database** with the relevant information. OEMs are required to communicate and enforce the certification conditions within its reseller/partner base. In case of a model change, the older product must be phased out within 30 days of the certificate date.
10. Update Lab information stores: in addition to the Product Database updates, TAS Coordinator captures all relevant process information, including electronic copies of all checklists (scan hard copies if required).
11. Once the OEM updates the portal, the OEM **partners activate** the new product by submitting pricing according to the certified standard and thereby offering the product to Government.
12. **Update website:** the TAS Coordinator generates a report of the Certified Products Database on a regular basis, and facilitates uploading to the SITA website for access by clients of the process. New versions of all technical and process documents are uploaded to the website as required (e.g. specs, checklists, OEM logos).

The table below describes the certification process in terms of the RACI (Responsible / Accountable / Consult / Inform) model. A process diagram has been included in Annex D.

Action	R	A	C	I
1. Request	OEM	OEM	SITA website	TAS
2. Schedule	TAS	TAS		OEM
3. Evaluate	TAS	TAS	OEM	
4. Certify	TAS	TAS		OEM
5. Communicate	TAS, OEM	TAS, OEM		Industry, clients
6. Update website	TAS	TAS	TAS	
7. Execute	Partners, resellers	OEM		

Table 2: Technology certification roles and responsibilities

Note that **no sales** of uncertified products to Government will be allowed. Contravention of this condition may result in blacklisting of the OEM, supplier or product.

All certificates and relevant information can be found on the SITA website under Product Certification (www.sita.co.za/prodcert.htm), or by navigating to the Product Certification page under Procurement on the SITA home page at www.sita.co.za.

3.2.1 Format of certification request

All certification requests must be forwarded to the TAS service desk: tas@sita.co.za. The request must contain the following information as formal deliverables:

- A formal request on the supplier's letterhead specifying the product requiring certification listing all relevant details (at least the Category/Item and product model name).
- A completed electronic copy of the **Product Certification Checklist**, with all relevant details populated and questions answered.
- All required deliverables (certificates, data sheets, reports, etc.) stipulated in the Checklist and Detail Spec.
- A completed soft copy of the SITA **Detail Technical Specification** with all details of the product. This submission must be based on the **current** technical specification (latest Tech Update). Draft versions of the spec will **not** be accepted. Note that **no changes** may be made to the specification as provided.

3.2.2 Evaluation deliverables

All required deliverables are documented in the Product Certification Checklist, which can be downloaded from the Certification website. Only once all deliverables have been submitted will an evaluation meeting be scheduled with the OEM. Products will not be certified until all technical issues have been resolved.

3.3 Tech Lab processes

The majority of processes within the Tech Lab are in support of the TCP. This section details the physical processes that must be followed in order for the TCP to be successful.

3.3.1 Process OEM request

The OEM initiates the certification process by submitting a formal request to TAS as described above.

3.3.2 Tech verification process

The first step in product certification is to verify that the submitted product complies with all technical, regulatory and process requirements.

- OEM submits all required documentation and technical information for product certification (see Annex E).
- Lab Coordinator schedules a suitable time for the verification process. Meeting can be scheduled in-person in the Lab or other venue, or virtually depending on logistics.
- SITA TAS consultant meets with OEM rep at the scheduled time.
- All technical deliverables are checked for compliance.
- All findings are logged against the Product Certification Checklist (quality record).
- Product is demonstrated and inspected for functionality and compliance.
- After meeting, findings are communicated to Lab Coordinator via completed Cert Checklist.
- Lab Coordinator updates Product Certification Database with findings from verification meeting, which is a process quality record. The database contains the following fields:

Field	Description
Cert #	Unique record index, used as certificate number
Domain	Technology domain (e.g. PCD, NET)

Brand	OEM brand name
Item	Domain Item name (e.g. PC1, Tablet1)
Product	Product name and model
Request date	Request submitted
Meeting date	Date of verification meeting
Demo unit?	Test unit delivered?
Lab Tech	Technician assigned to test device
Lifespan (Years)	Expected model lifespan
Certify date	Date of certification (finalised process)
Expiry date	Certificate expiry date (based on lifespan)
Comment/Notes/Issues	Findings, outstanding info, extension date
Spec version	Version number of domain technical specification

Table 3: Certification Database fields

Note: A certificate record number may not necessarily result in a product certificate being issued, e.g. if a product is disqualified due to non-compliance.

3.3.3 Testing of OEM equipment

Most (but not all) of the devices that need to be certified by SITA require a physical test in order to confirm compliance with Government requirements. These tests are performed in the Technology Lab, with some exceptions where systems or equipment cannot be transported to or realistically tested in the Lab. Tests are designed to verify or quantify the following criteria:

- Compliance with specifications (including MIOS and MISS requirements)
- Performance
- Functionality
- Compatibility
- Security
- Quality

3.3.3.1 Book in test equipment

Before testing can start, the device must be submitted to the Lab by the OEM.

- OEM delivers product to Lab
- Lab Coordinator completes Lab book-in form with relevant product details (see Annex G)
- SITA and OEM representatives sign the form, formalising the booking process (including disclaimer)
- OEM receives a copy of the signed book-in form as proof of submission

Disclaimer: Although all possible measures are taken to ensure the safekeeping of the equipment, SITA cannot be held responsible for any loss or damage to the product or components during the testing process. Ultimately the risk of loss or damage to demo equipment resides with the OEM.

3.3.3.2 Perform Lab tests

Lab tests are performed by technicians in terms of a pre-defined Lab process and device Checklist. The Checklist guides the test process and documents the results for further processing.

For each tested device the following steps are followed:

- Device is allocated to a technician by the Lab Coordinator
- Designated Lab Technician takes possession of the demo product assigned to him for testing.
- Associated technical information is provided to the Technician by the Lab Coordinator
- Based on the device type, Lab Tech downloads the appropriate Lab Checklist from the Lab storage system (NAS).
- Lab Tech prepares the Checklist by capturing all relevant product information into the document.
- Lab Tech performs the Lab test process by doing all designated checks, tests and benchmarks and capturing the results and findings in the Checklist.
- Photos are taken of the device for future reference and audit purposes.
- Once all tests and Lab processes are complete, the Lab Tech concludes the Checklist by performing the final actions of capturing and storing all relevant info, findings, photos, test results and lab samples on the Lab storage system (NAS).
- Any outstanding issues or negative findings are communicated with the Lab Coordinator for escalation to TAS and subsequently the OEM.
- Lab Tech submits the Checklist to Lab Coordinator for finalisation of the process.
- Lab Coordinator logs the Checklist and all other submitted information, including test documents, results, photos, etc.
- Lab Coordinator marks the relevant record in the Product Database as “tests complete”

In some cases it is more practical or effective to perform tests outside the Lab environment, e.g. at an OEM’s demo facility. This will be arranged on a case-by-case basis with the OEM. Except for the location of the test, all other processes and procedures remain the same.

3.3.3.3 Longer-term tests

The agreement with OEMs (MoA) includes a clause that enables SITA to arrange a longer-term evaluation of certain product samples. This may include lending devices to clients for POCs or pilot projects, extended field tests, additional Lab tests, or practical use within the environment. This will be arranged with OEMs as required.

3.3.3.4 Book out test equipment

- Lab Coordinator arranges for device to be prepared for collection
- Lab Tech erases device data storage, packs device in original box with all accessories
- Lab Coordinator prepares paperwork for book-out
- Lab Coordinator notifies OEM that the device is ready to be collected
  - All packaging, software and accessories is checked to ensure nothing remains behind in the Lab
- OEM arrives to collect the product, presenting their copy of the book-in form
- Product is handed over to the OEM rep for inspection, including packaging and accessories
- SITA and OEM reps sign the booking form, formalising the book-out process
- Copies of the signed forms are made for the TAS file, the OEM and SITA Security.

3.3.4 Finalise product certification

- Lab Coordinator checks that the verification process is complete:
  - All outstanding information/deliverables and demo/test equipment have been received from OEM (as per Certification checklist).
  - All required Lab tests have been completed and documented (Lab checklist).
- Product Certification Database is updated with findings.
- Lab Coordinator generates the final Product Certificate from the appropriate record in the Product Certification Database.
- The Certificate is sent to the OEM for use in subsequent procurement processes by Government.

3.4 Development and Update of Specifications

A fundamental component of the TCP is to ensure that technical specifications are developed and remain in line with Government requirements, and also continously reflect what is available in the rapidly changing market. Technology updates are periodic amendments, additions or corrections of existing technical specifications, and are implemented as and when required by each individual technology domain. These specifications include the following elements:

- *De facto* and *de jure* technology standards
- Performance requirements
- Configuration requirements
- Service requirements
- System and componenent pricing (for TCO calculations)

The following steps/actions come into play whenever a tech update process is initiated, or when a new specification is developed for new domains.

1. Research: Before and during the spec development process, current and new technologies and solutions in the domain are researched, identifying those applicable to Government.
2. Consult: In addition to industry research, Government users and industry role players are polled for input on new or changing business requirements. Ultimately the specifications capture Government's ICT requirements, and therefore all specifications must reflect end-user requirements within SITA's client base.
3. Create draft specification: TAS creates a draft version of the new specification or update to existing specification.
4. Request for Comment: A proposed draft specification or tech update (TU) is created by TAS and published on the SITA TCP website for access by all role players, including Government and industry. This includes a TU summary as well as the detail specification. As many draft versions as deemed necessary are prepared and circulated for comment before finalisation of a spec. All role players are notified of the RFC process, to ensure as many inputs from role players as possible.
5. Incorporate RFC feedback: Inputs and comments from role players are processed and incorporated into the draft documents. This is an iterative process which is done for every version of the draft documents distributed. Once all feedback has been captured, the ratification process is initiated.
6. Ratify: In consultation with all role players, the proposal for new technology specifications is finalised. The final decision to ratify any Tech Update is made by the duly delegated GITOC body, i.e. the Technology Task Team (TTT), a subcommittee of the IT Service Management (ITSM) standing

committee. The TTT deliberates on and ratifies specifications based on recommendations from TAS. The ratification process requires agreement with the new specifications by Government and industry, specifically OEMs. After ratification, the decision is communicated to the ITSM , which has ultimate veto rights over the process. The ITSM has established guidelines within which the TTT must operate w.r.t. ratification.

7. **Implement:** After ratification TAS formally communicates the changes to all role players, after which the new technology specification is implemented. Documents related to the new specification (the Tech Update Summary as well as the updated Detail Spec) are posted on the SITA Certification website for access by all role players, and for use by OEMs in the TCP.
8. **Execute:** After a tech update has been implemented, OEMs must ensure that their products are configured as required by the specification. Any new product certifications must be done according to the latest version of the specification, as ratified by the TTT.
9. **Update website:** The new version of the specifications are uploaded to the TCP website for access by OEMs and clients.

The table below describes the TU process in terms of the RACI (Responsible / Accountable / Consult / Inform) model. Process diagrams have been included in the Annex D for reference.

Action	R	A	C	I
1. Research	TAS	TAS		
2. Consult (obtain input)	TAS	TAS	OEMs, TTT, clients	
3. Draft spec	TAS	TAS		
4. RFC	TAS	TAS	OEMs, TTT, clients	Gov, industry
5. Incorporate feedback	TAS	TAS		
6. Ratify	TTT	TAS	OEMs	ITSM
7. Implement	TAS	TAS		Industry
8. Execute	Resellers	OEMs	TAS	
9. Update website	TAS	TAS	TAS	OEM

Table 4: TU roles and responsibilities

3.4.1 Notes:

1. The implementation of a tech update may require model changes for some OEM products. This must be managed by the OEM in a timely manner via the standard certification process.
2. In cases where system configurations are changed, OEMs must inform their partners if this will have a price impact, to ensure that quoted pricing complies with minimum specifications.
3. SITA will create new technology categories or specifications within a technology domain as and when required by Government. This will be done in consultation with GITOC structures, Government and industry players.

3.5 Technology research

The research process gathers information from as many different sources as possible, including, but not limited to, the following:

- Industry research organisations such as Gartner, IDG, Info-Tech and BM-IT.
- Industry associations/publications such as Avixa, SACIA, BICSI and Hi-Tech Security Solutions.
- Requests for Comment (RFC) – the primary means of gathering inputs on TAS documents (e.g. specifications) from all role players
- Requests for Information (RFI) – publications related to a specific project or initiative to gather information from industry and other role players.
- Meetings with clients and end-users about new or existing requirements.
- Visits to client offices or facilities.
- New technology announcements.
- Industry events such as trade shows and exhibitions.
- Webinars and other on-line information sessions.
- Technology or solution demonstrations (physical or on-line).
- Technical training sessions (physical or on-line).
- Lab tests or POCs of new technologies and devices.
- Visits to client premises to gain understanding of practical issues in use of technology by Departments.
- Visits to third-party facilities for demonstration or workshop purposes (e.g. Network Operation Centres).
- Visits to OEM or ODM facilities where on-site demonstrations are not possible or feasible.
- Visits to factories or facilities of South African OEMs (part of SITA's mandate to develop and support South African industry).

All these information sources are utilised to enable effective and comprehensive technology research, contributing to a holistic picture of the technology landscape, enabling TAS to accurately document technology trends, requirements and specifications for use in the TCP.

3.6 Information sharing and collaboration

TAS continually shares information resulting from its research of new technologies with industry and Government role players. Regularly scheduled forums such as the GITOC TTT is used as an important forum to discuss new technologies and user requirements.

In addition to the TTT, *ad hoc* events presentations or Government sessions such as GITOC subcommittee meetings are also used to disseminate research information. TAS also generates Research Reports on specific important matters which are shared widely within Government and industry.

Formal or informal presentations, and sharing of third-party reports and articles are also used to inform SITA's client base about new technologies.

Collaboration on new specifications include discussions with clients and/or industry, and an RFC process whereby draft specifications are shared with all role players for comment before ratification.

The process includes the following actions/steps:

1. **Research:** TAS performs continuous technology research, identifying new technologies and products, as well as trends within the technology landscape. Research includes gathering information on new requirements from Government clients, as well as changes in existing requirements. This may require visiting client premises (e.g. schools), OEM facilities or field deployments of technologies or solutions.
2. **Share:** As part of its standard GITOC and industry feedback process, TAS shares technology research with role players, including the GITOC TTT and ITSM.
3. **Collaborate:** In conjunction with role players, clients and subject matter experts, research findings are incorporated into new or existing standards and specification. This typically kicks off the Tech Update process, through which formal changes to standards are processed.

3.7 Technology advice

TAS provides technology consultation to Departments on a continual basis. A broad cross-section of Departments are regularly advised on technology specifications, TCO, deployment best practices, and procurement. Advisory services are typically rendered on an *ad hoc* basis, except where there is a specific client project or service framework (e.g. for transversal contracts), in which case a more formal agreement guides the service.

The advisory service typically includes the following actions/steps:

1. Receive **request** from client. This can be a formal or informal request, in the form of a phone call, e-mail or service request. The request is acknowledged, after which work can commence.
2. **Research** client requirement, business environment, or possible technology solutions. Output from this process is documented in varying degrees of formality, guided by the specific context of the client request. The document can range from an e-mail to the client, all the way to a formal technology specification for a tender.
3. **Respond** to client, providing full advice on the original request. This could be a simple answer to a client's question, or it could be the culmination of a multi-month process such as specification, evaluation and award of a transversal contract.

4. General rules and guidelines

The following rules and guidelines are applied during technology certification.

1. The technical specification always represents **minimum requirements**, therefore any solution that exceeds or improves on the stated requirements is generally acceptable, assuming other factors such as TCO are taken into account.
2. In general for computing devices (e.g. servers, PCs and laptops), if the system board has changed, a new Microsoft HCL (Hardware Compatibility List) certification is required, or a hard disk image changes (i.e. different software/drivers), this will require re-certification. Components that typically require a new certificate include the chipset and motherboard. A product name change or update of the chassis would not necessarily require a model change – especially if the changes only amount to configuration (e.g. CPU, RAM, storage, connectivity). Changes of this nature require only a certificate update, to be requested by the OEM.
3. If a product is still generally available for sale by the certificate expiry date, the OEM may request SITA to extend the certificate by a further fixed period.
4. A certification for a model change (i.e. model replacement of an existing certified product) will supersede the existing certificate.

5. All role players are provided ample opportunity to contribute to the Tech Update RFC process. If no comment is received from an OEM, it is assumed that they agree with the proposed changes.
6. Once a Tech Update is ratified, it must be implemented by suppliers by the specified date.
7. The fact that a product is certified does not mean it is automatically available to Government for procurement. In order for a product to be purchased by Government, both the supplier and product must be explicitly accredited by SITA on a Transversal or Period Contract. The Venn diagram indicates all requirements for a product to be legally supplied to Government: only the intersection in the centre (where all 3 processes are fully in place) meets all requirements.

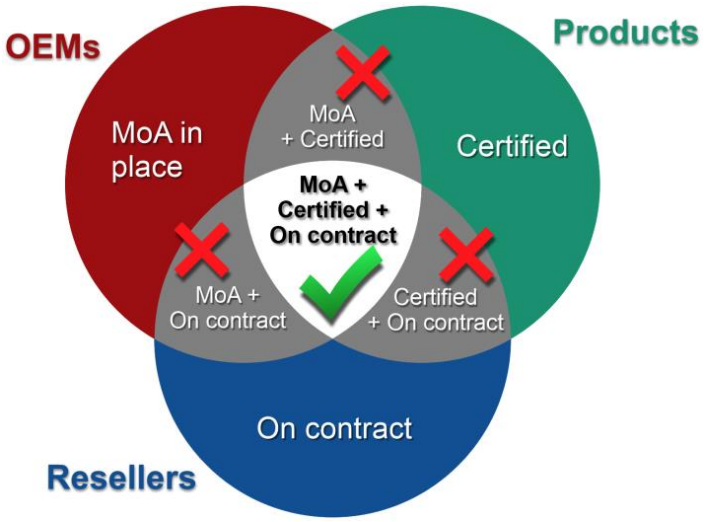


Figure 6: Requirements for supply to Government

8. SITA reserves the right to postpone or cancel the product certification process if the OEM is not sufficiently prepared for the evaluation, or if OEM does not timeously provide all required deliverables.
9. All product certifications are done solely at the discretion of SITA. In support of its mandate to enable economies of scale, SITA cannot certify every single product of every OEM. Therefore, certified products have to be demonstrated to have a definite application within Government, and that there is a documented business need.
10. In support of the certification process, a formal relationship must be established between SITA and the OEM via a Memorandum of Agreement, which must be completed and submitted by the OEM. The MoA must be finalised before any products may be certified.
11. The complete solution as supplied to the client must be fully supported and warranted by the OEM.

5. Conclusion

Cooperation and collaboration are needed from all role players to ensure that high-quality, up-to-date, cost-effective technology is available to Government in a timely fashion. TAS would like to acknowledge the valuable contribution made to the technology certification process by all role players (including clients, OEMs and suppliers). Without these role players, TAS would be unable to manage its technology database to meet the requirements of Government.

Annex A: Product Certificate sample

Product certificates are issued to all products that are approved via the technology certification process. A sample is included here for illustration. The certificate includes all relevant information about the specification version, product, technology domain, certification date and validity period.

SITA SOC Ltd, 459 Tsitsa Street, Erasmuskloof, Pretoria, South Africa • PO Box 26100, Monument Park, 0105, South Africa
Tel: +27 12 482 3000 • Fax +27 12 367 5151 • Reg. No 1999/001899/30 • www.sita.co.za

Our Ref: Product Certification
Enquiries: tas@sita.co.za
Tel: 012 482 2872
Date: 2020-05-19

[redacted]

Attention: [redacted]

SITA PRODUCT CERTIFICATE

In accordance with the SITA Act and applicable regulations, SITA hereby certifies the following product(s) as compliant with Government requirements and technical specifications as noted below.

Technology domain	Peripherals
Brand name	[redacted]
Item	Prn_Mono1
Product	[redacted]
Spec version	Periph version 2.32
Certificate number	Periph 1891
Certification date	2019-08-06
Expiry date	2021-08-05
Website	www.sita.co.za/prodcert.htm

Conditions of certification:

- Products supplied to Government under this standard must comply with all requirements, specifications and conditions of certification as captured and approved in the OEM's technical submission to SITA.
- SITA reserves the right to remove OEMs or products from the database at any time.

[redacted]

SITA Product Certificate v1.9

Annex B: Certified Product Database

Product certificates are generated and maintained using the Certified Product Database. This database is formatted for client and supplier use and uploaded to the Certification website on a regular basis. An extract from the current database follows.

Certified Product Database

2022-03-17

SITA

Cert #	Domain	Brand	Item	Product	Expiry
2723	AT	Tobii Dynavox	AS_AACdesign	Boardmaker 7	2023-08-12
2557	AT	Nuance	AS_STT	Dragon v15 Home / Professional / Pro Group / Medical Practice v	2024-02-08
2724	AT	Tobii Dynavox	AT_EyeGaze	PCEye 5	2023-09-02
2101	AT	Widgit	AT_Software	FirstKeys 3	2022-07-01
2446	AVCT	Philips	AT_Recorder	DVT1150	2024-12-14
2447	AVCT	Philips	AT_Recorder	DVT2110 / DVT2810	2024-12-14
2448	AVCT	Philips	AT_Recorder	DVT4110	2024-12-14
907	AVCT	Pexip	MCU_Soft	MCU+VCU Soft	2026-07-05
2069	AVCT	Samsung	Mon_PD1	QBR Series (QB43R / QB49R / QB55R / QB65R / QB75R)	2023-02-04
1232	AVCT	Huawei	Phone_IP1	eSpace 7910	2022-12-31
1233	AVCT	Huawei	Phone_IP1	eSpace 7950	2022-12-31
1235	AVCT	Huawei	Phone_Soft	eSpace Soft Client	2022-12-31
2432	AVCT	Acer	Proj_Basic	X1227i, X1327Wi, X1527i	2023-10-29
2433	AVCT	Acer	Proj_Basic	S1286Hn, S1386WHn	2023-10-29
2618	AVCT	Epson	Proj_Basic	EB-FH52	2024-06-22
1791	AVCT	ViewSonic	Proj_Basic	PA503X	2023-12-13
2434	AVCT	Acer	Proj_Mid	P1260BTi, P1360WBTi, P1560BTi	2023-12-04
1161	AVCT	Epson	Proj_Mid	EB-2265U/2255U/2250U	2022-03-31
1160	AVCT	Epson	Proj_UltraP	EB-1795F/1780W	2023-03-31
2470	AVCT	Philips	Rec_AudioSW	SpeechExec Dictate / SpeechExec Pro Dictate	2022-12-23
2467	AVCT	Philips	Rec_Voice	DVT8110	2024-12-14
2468	AVCT	Philips	Rec_Voice	DPM8900	2024-12-14
2469	AVCT	Philips	Rec_Voice	DPM6000, DPM7200, DPM8200	2024-12-14
1236	AVCT	Huawei	VC_Desktop	DP300	2022-12-31
1241	AVCT	Huawei	VC_Room1	RP100/200-S	2022-12-31
2341	AVCT	Huawei	VC_Room1	IdeaHub S / Pro series	2026-02-11
1243	AVCT	Huawei	VC_Room2	RH200-H	2022-12-31
1244	AVCT	Huawei	VC_Room2	TE50	2022-12-31
1245	AVCT	Huawei	VC_Room2	RP100/200-A	2022-12-31
1246	AVCT	Huawei	VC_Room2	TE60	2022-12-31
1247	AVCT	Huawei	VC_Room2	TX50	2022-12-31
1248	AVCT	Huawei	VC_Soft	TE Desktop/Mobile	2022-12-31
1785	AVCT	CleverTouch	Whiteboard1	Plus series	2022-07-23
1786	AVCT	CleverTouch	Whiteboard1	Pro series	2022-07-23
2578	AVCT	CleverTouch	Whiteboard1	Impact series	2024-04-21
2579	AVCT	CleverTouch	Whiteboard1	Impact Plus series	2024-04-21
2580	AVCT	CleverTouch	Whiteboard1	UX Pro series	2024-04-21
1169	AVCT	Epson	Whiteboard1	EB-695Wi/EB-685Wi/EB-680Wi	2023-03-31
2342	AVCT	Huawei	Whiteboard1	IdeaHub S / Pro series	2026-02-11
2546	AVCT	Inspireware	Whiteboard1	Inspire Touch LED Series	2024-02-25
2347	AVCT	Inspireware	Whiteboard2	InspireBoard DVT	2025-10-12
2741	EDU	SOTI	DevMgmt	MobiControl	2022-08-31
2656	EDU	Inspireware	IWB_Edu	InspireBoard DVT	2026-04-22
2657	EDU	Inspireware	IWB_Edu	Inspire Touch LED Series	2026-04-22
2836	EDU	Mecer	Note_Edu3	SF40IL6 / SF40IL6+	2023-12-09
2761	EDU	Odin	Tab_Edu1	Omang Device 8-inch	2023-02-23
2762	EDU	Odin	Tab_Edu1	Omang Device 10-inch	2023-02-23
964	Infra	Modrac	Rack_Env	EnviroRack IP Series	2032-09-14
965	Infra	Modrac	Rack_Env	Envirorac Lite Series	2032-10-12
972	Infra	Netshield	Rack_Env	NIP54-uu-wwdd-0	2030-11-17
910	Infra	Rittal	Rack_Env	Rittal TSIT IP55 Environmental Rack	2036-07-05
2011	Infra	GlobalSIX	Rack_Net	Network Cabinet range	2029-08-13
968	Infra	Modrac	Rack_Net	Network Rack Series	2032-10-12
970	Infra	Netshield	Rack_Net	NDC-PD-68yyU	2030-11-17
908	Infra	Rittal	Rack_Net	Rittal TSIT Network/Server rack	2036-07-05
2012	Infra	GlobalSIX	Rack_Srv	Server Cabinet range	2029-08-13
967	Infra	Modrac	Rack_Srv	Server Rack Series	2032-10-12

Annex C: OEM Database

This database is used to track the status of OEM agreements (MoAs). The date and version of the agreement, as well as details about the brand representation are maintained as part of each record. An extract from the database follows.

Technology Certification: OEM Database

2022.03.17

SITA

Brand Name	PCD	Periph	AT	EDU	SAC	SrvSto	AVC	Cyber	Net	Infra
42Gears	●									
ABBYY			●							
Ablenet			●							
Absolute	●			●						
Acer	●			●						
Adlerac										●
AgfaPhoto		●								
Alcatel	●									
Alcatel-Lucent							●		●	
APC										●
Argox	●	●								
Armlux Digital	●									
Asus	●	●							●	
Attainment			●							
Ausdom	●						●			
Avaya							●		●	
Aver							●			
Avision		●								
Barco							●			
Bhelela				●						
BioRugged	●									
Bixolon		●								
BlackView	●									
Bluebird	●									
Brother		●								
Canon		●					●			
Casio							●			
CAT Phones	●									
Ceratech (Accuratus)			●							
Chainway	●									
Chuwi	●									
Cipherlab	●	●								
Cisco						●	●		●	●
Claro			●							
Classmate PC	●			●						
CleverTouch							●			
Clevy			●							
CMITech		●			●					
Colortrac		●								
Connex	●	●		●			●			
CPS				●						●
CPS										●
Crestron							●			
Crick Software			●							
CrossCall	●									
Crucial	●									
Datalogic	●	●								
Dataproducts		●								

Annex D: OEM process diagram

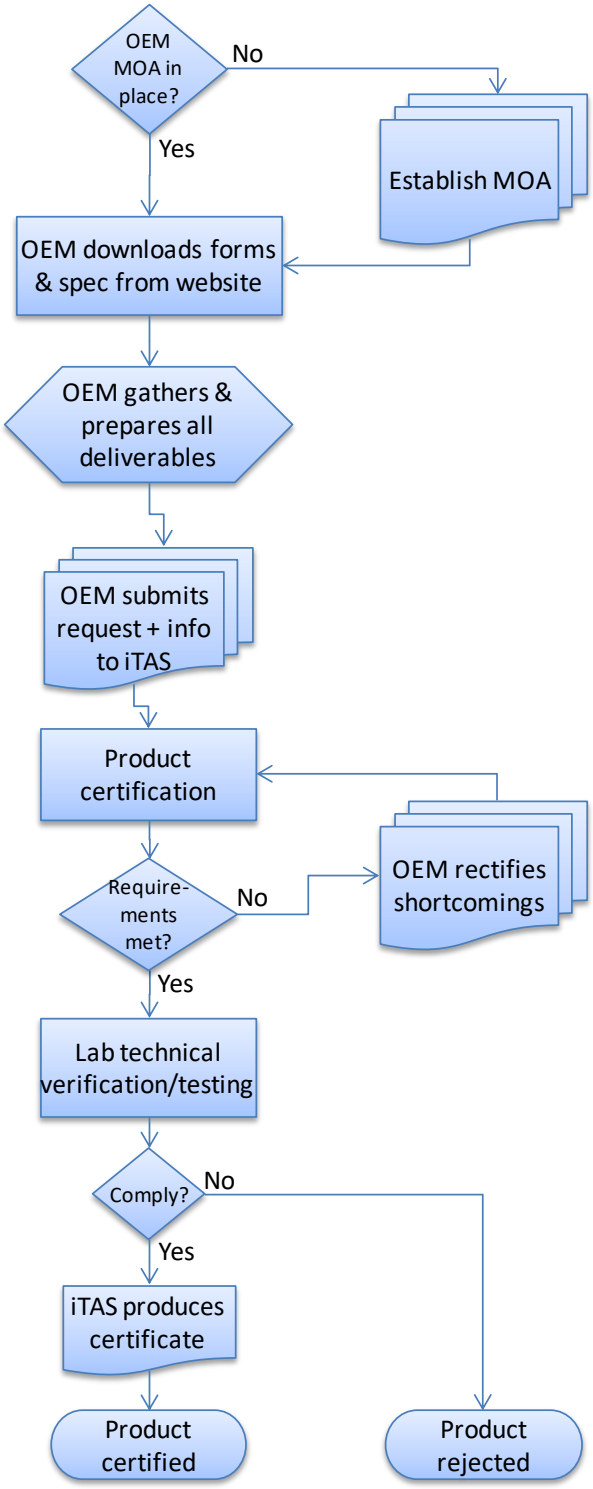


Figure 7: OEM product certification process diagram

Annex E: Processes diagrams, roles and responsibilities

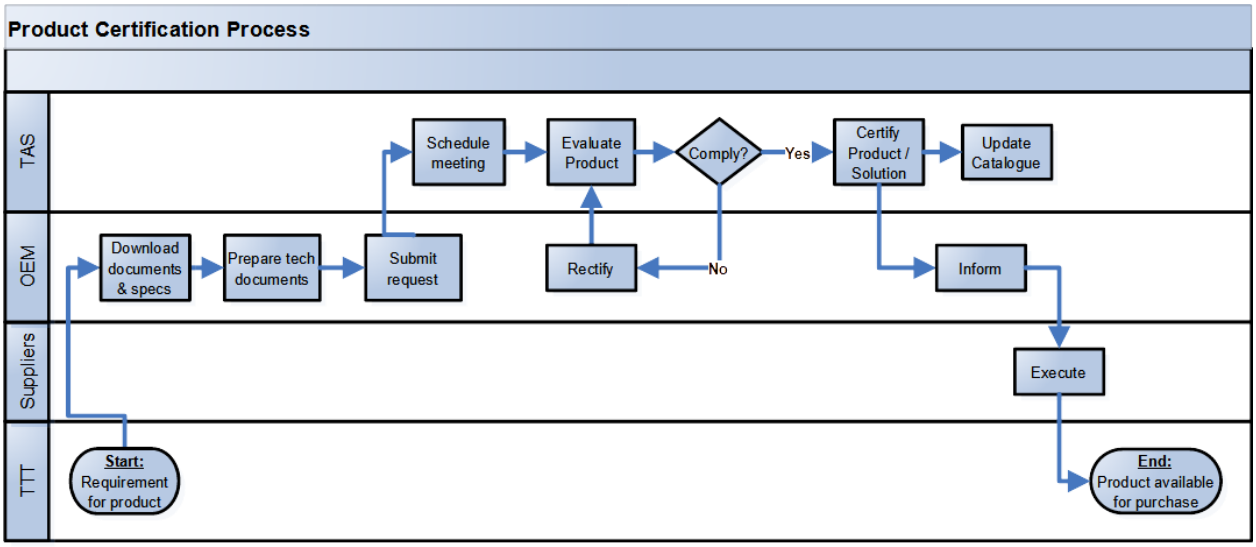


Figure 8: Product certification process

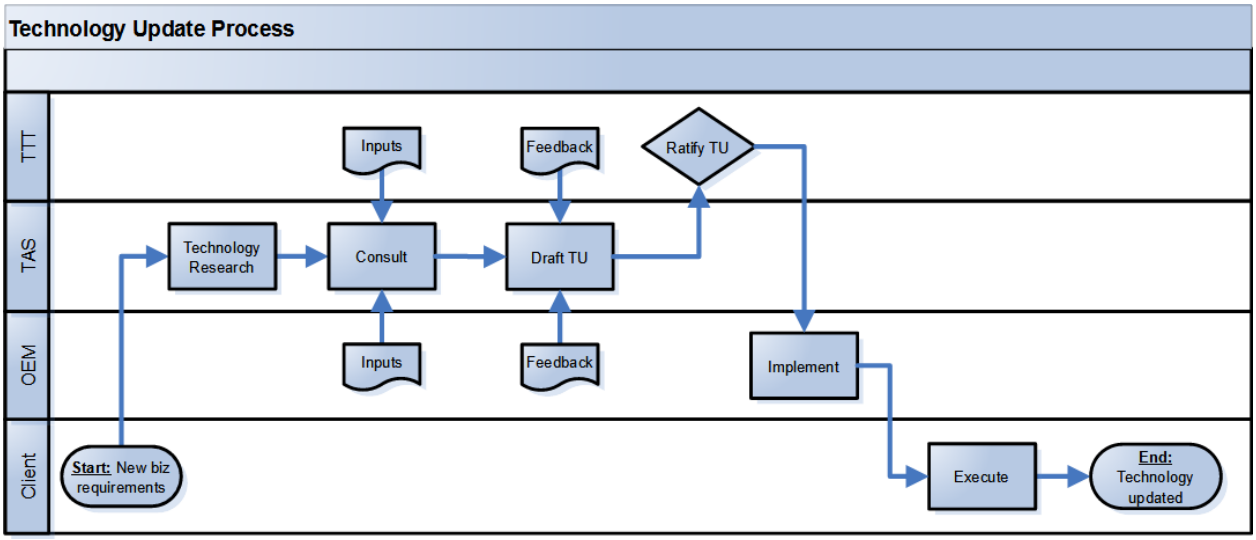


Figure 9: Tech update process

Annex F: Product certification checklist

The Product Certification Checklist lists all required deliverables, as well as actions to take prior to the product evaluation meeting. Products will be certified once all deliverables have been processed, and any issues identified during evaluation are resolved.

The checklist is available for download from the Certification website. It must be completed and submitted before commencement of the certification process. The checklist will be used during evaluation to indicate resolved and outstanding issues. An extract of the document:

Product Certification Checklist

v5.3

SITA

Product Brand	
Technology Domain	
Organisation representing brand (delegated by OEM)	
Item/Category (e.g. PC2 / Srv3 from submitted Detail Spec)	
Product to be certified (model name)	

Notes/Conditions for Certification Process
• This checklist and other related documents must be downloaded from www.sita.co.za/prodcert.htm.
• The checklist must be completed and submitted with all deliverables **before** a meeting can be scheduled.
• A single soft-copy folder must be submitted for every product to be certified.
• The process will be **cancelled** if all outstanding issues are not resolved within **15 days** of the meeting date.

Verification meeting	To be scheduled
SITA Tech Lab representative	
Meeting date	
TAS rep signature	

Deliverables (soft copy)	**Supplied?**	**Notes / Comments**
Certification request from OEM (signed letterhead with Item | Model name)		
Completed Product Certification Checklist (in original .XLSX format)		
Completed SITA Detail Spec		
Data sheet / brochure and technical info		
Product family range overview (listing models & features)		
Product image (photo or screenshot of product)		
SITA Detail Spec (Completed Excel technical sheet from wwwsita.co.za/prodcert.htm)		
Latest version of Detail Spec submitted		
Fully completed with all technical details as required		
Product must comply fully with all stipulated technical requirements and specifications		
Evaluation unit/demo of product		
Demo unit supplied for Lab tests (alternatively, product test or demonstration as per process requirements)		
Certificate lifespan (projected remaining product life)	Years	
Remaining lifespan of product before transition to new model (estimated/projected end of sale, when product will no be longer available for purchase)		
Certifications and other info as per Detail Spec (mark N/A if not applicable)		
OEM: ISO 900x & 1400x (not required if submitted with MOA)		
Regulatory compliance: (Declaration of Conformity)	Applicable to hardware products only	

Annex G: MoA checklist

The OEM MoA Checklist lists all required deliverables for conclusion of a Memorandum of Agreement. The checklist is available for download from the Certification website. It must be completed and submitted with all specified deliverables before commencement of the MoA process. An extract of the document:

OEM Memorandum of Agreement

v2.6

SITA

OEM / Brand .....

Technology Domain .....

Organisation representing brand (delegated by OEM) .....

Date of meeting (to be scheduled) .....

Attendee Name	Organisation	Signature

Notes/Conditions for MoA Process
This checklist must be completed and all requirements complied with before the MoA meeting can be scheduled.
All deliverables, including this checklist, must be submitted **in soft copy** prior to the OEM meeting.
Copies of specific deliverables as specified below must be present at the OEM meeting.
All outstanding issues must be resolved within 2 weeks of MoA meeting.
The MOA will be **cancelled** if the OEM does not start with product certification within 120 days of the agreement.

Deliverables	Supplied?	Notes / Comments
Completed MoA checklist (in .XLS format)		
OEM delegation/agreement (if applicable, i.e. OEM is not applying directly)		
Memorandum of Agreement (MoA):		
Any qualifications, exclusions or provisions to the MOA conditions? (I.e. MOA conditions you could not accept, had to qualify, or need clarification on.)		
Signed MOA (scanned **PDF**)		
Soft copy of completed MOA (MS Word **.docx**)		
Certificates:	Applicable to hardware products only	
ISO 9001: Quality Management System		
ISO 14001: Environmental Management System		
Reduction of Hazardous Substances (RoHS)		
Eco, Environmental or Sustainability policy/statement		

Annex H: Demo Equipment Control

The Tech Lab Demo Equipment Control Sheet is used to keep track of evaluation/demonstration equipment in the Lab. Delivery and collection processes are formally recorded for future reference, capturing signatures from OEM and SITA representatives when booking products in and out.

Tech Lab: Demo Equipment Control Sheet

v1.9

SITA

Product Brand	
Supplier	

Make and Model / Description	Serial Number	Box / Cables
		/
		/
		/
		/
		/
		/
		/
		/
		/
		/
		/
		/
		/
		/

Product IN	Date: 20yy/mm/dd	
	SITA Representative	**Supplier Representative**
Name		
Phone #		
Signature		

Disclaimer:

Although all possible measures will be taken to ensure the safekeeping of the equipment, SITA cannot be held responsible for any loss or damage to the product or components during the testing process.

Product OUT	Date: 20yy/mm/dd	
	SITA Representative	**Supplier Representative**
Name		
Phone #		
Signature		

Annex I: Contact details

Contact details of SITA personnel responsible for the technology certification process:

Role	Name	Division	Contact details
TAS service desk (all requests to be sent to this address)	TAS e-mail address	TAS	tas@sita.co.za 012 482 3000
TAS Coordinator	<vacant>	TAS	<vacant>
Technology management and consultation	Deon Nel	TAS	deon.nel@sita.co.za 012 482 3000
Technology management and consultation	Izak de Villiers	TAS	izak.devilliers@sita.co.za 012 482 3000
HOD: ICT Governance National Consulting Services Division	Tshavhu Mukhodobwane	ICT Governance	tshavhu.mukhodobwane@sita.co.za

Table 5: TAS contact details

Annex J: Abbreviations, Terms and Definitions

A.1 Abbreviations

BEE	Black Economic Empowerment
CCTV	Closed Circuit Television
GITOC	Government IT Officers Council
ICT	Information and Communications Technology
IT	Information Technology
ITSM	IT Service Management committee of the GITO Council
LAN	Local Area Network
MoA	Memorandum of Agreement
NIPP	National Industrial Participation Programme
ODM	Original Design Manufacturer
OEM	Original Equipment Manufacturer
PCD	Personal Computing Device, one of the certified Technology Domains
RFC	Request for Comment
RFB	Request for Bid
RFP	Request for Proposal
RFQ	Request for Quotation
SCM	Supply Chain Management
SITA	State IT Agency
TAS	Technology Advisory Services, a division of SITA ICT Governance, incorporating the Technology Lab
TCO	Technology-based Total Cost of Ownership
TCP	Technology Certification Process
TSP	Transversal Sourcing Panel: SITA on-line repository of suppliers, products and pricing
TTT	Technical Task Team, a sub-committee of the GITOC Standing Committee on IT Service Management
TU	Tech Update
WLAN	Wireless Local Area Network

A.2 Terms and Definitions

Term	Definition
Component manufacturer	A third-party manufacturer of ICT components that form the basis of complete systems or solutions supplied to Government by OEMs. This includes, for example, CPU manufacturers such as AMD and Intel, drive manufacturers such as Seagate and Western Digital, or software vendors such as Microsoft, Red Hat or VMware. Components from third-party manufacturers cannot be certified directly via the TPC, but are offered by OEMs as part of a complete solution.
OEM	Original Equipment Manufacturer, or properly delegated legal entity representing a product brand in South Africa.