



Isalathiso: 20200113-3017  
Inombolo yefayili: 2/9/4/3  
Imibuzo: T Mlambo

INgcaciso eMfutshane yeCandelo loLawulo loLwazi neNgcaciso: 0002/2020

Iya: KumaSekela Balawuli-Jikelele, kuBalawuli abaziiNtloko, kuBalawuli, kwiiNtloko zamacandelo namaandelwana kwaNdlunkulu nakwii-ofisi zezithili

### Isihloko: Ishedyuli yeentlanganiso ze-ITOPSCOM

1. Ikomiti i-Western Cape Education Department, Information and Communications Technology (ICT) Operational Committee (ITOPSCOM) yikomiti eyongezelweyo ye-ITSTEERCOM ehlangana qho ngenyanga, ngokwethyibhile elapha ngezantsi, ukuthatha isigqibo ngezicelo zezixhobo ezimiseliweyo ze-ICT.
2. Abaphathi abajongene nestokhwe mabazalise ifom yesicelo i-ITOPSCOM (isiHlomelo A) xa kusenziwa isicelo seempahla neenkonzo ze-ICT. Makungeniswe isicelo esizaliswe ngokupheleleyo, saza sasayinwa esiyintsusa (*original application*) kwi-Ofisi kaNobhala wekomiti i-ITOPSCOM, kwiGumbi 19-09A, kuMgangatho 19, eGolden Acre, eKapa. Zonke izicelo mazifike kwi-ofisi kaNobhala ubuncinane kanye ngeveki phambi kokuba iqhubeke intlanganiso. Nje ukuba singeniswe, isicelo/umenzi-sicelo uya kufumana ikopi yesicelo esivunyiweyo ukwenzela ukuba siqwalaselwe ngaphezulu okanye afumane i-imeyili ebachazelayo ukuba isicelo silandulwe.
3. Ikomiti i-TOPSCOM iya kwenza isigqibo ngokuphathelele kwii-ayithem eziqhelekileyo ze-ICT kuphela. Uluhlu oluqhelekileyo (isiHlomelo B) luhlaziywa ngokutsha yi-DotP:Ce-I rhoqo yaye ingcaciso ehlaziywe ngokutsha iya kufumaneka apha <https://mygov.westerncape.gov.za/services/it-policies-documents-and-forms>. Zonke izicelo ezingamiselwanga ziya kuthunyelwa kwikomiti i-ITSTEERCOM kunye nengcebiso.
4. Isicelo sezixhobo ze-ICT eziza kutshintshwa masikhatshwe yingxelo yobugcisa ecacisa ngesizathu sesicelo sokutshintshwa kwesixhobo eso. Kwiimeko apho izixhobo ze-ICT zithengelwa abaqeshwa abatsha, makuchazwe izizathu zokuba ngaba kukho izixhobo ze-ICT ebezinikwe nabani na okwisikhundla esithile phambi kokuqeshwa kwakhe yena yaye kuya kwenzeka ntoni na kwizixhobo ze-ICT.
5. Kucelwa niqinisekise ukuba ifom yesicelo i-ITOPSCOM iyachaza ukuba ngaba izixhobo ze-ICT ziya kuphinda zabelwe omnye umntu kunye/okanye ziya kuchithwa, kuloo meko, iCandelo loLawulo loKuthengwa kweeMpahla neenkonzo malaziswe ukwenzela ukutshintsha iingcaciso kwirejista yee-asethi.

6. Ishedyuli yeentlanganiso ze-ITOPSCOM zonyaka-mali ka-2020-21 nemihla yokungeniswa kwezicelo imi ngolu hlobo lulandelayo:

<b>UMHLA WENTLANGANISO</b>	<b>IXESHA</b>	<b>UMHLA WOKUVALA WOKUNGENISWA KWEZICELO</b>
29 Januwari 2020	09:00 – 12:00	22 Januwari 2020
26 Februwari 2020	09:00 – 12:00	19 Februwari 2020
25 Matshi 2020	09:00 – 12:00	18 Matshi 2020
29 Apreli 2020	09:00 – 12:00	22 Apreli 2020
27 Meyi 2020	09:00 – 12:00	20 Meyi 2020
24 Juni 2020	09:00 – 12:00	17 Juni 2020
29 Julayi 2020	09:00 – 12:00	22 Julayi 2020
26 Agasti 2020	09:00 – 12:00	19 Agasti 2020
30 Septemba 2020	09:00 – 12:00	23 Septemba 2020
28 Oktobha 2020	09:00 – 12:00	21 Oktobha 2020
25 Novemba 2020	09:00 – 12:00	18 Novemba 2020
27 Januwari 2021	09:00 – 12:00	20 Januwari 2021
24 Februwari 2021	09:00 – 12:00	17 Februwari 2021
31 Matshi 2021	09:00 – 12:00	24 Matshi 2021

7. Yonke imibuzo engeshedyuli yeentlanganiso ze-ITOPSCOM ingathunyelwa nge-imeyili apha: [Tapson.Mlambo@westerncape.gov.za](mailto:Tapson.Mlambo@westerncape.gov.za) okanye kuSekela Mlawuli ithunyelwe ngqo kuSekela Mlawuli wezoQuquzelelo lwe-ICT (kwiCandelo loLawulo loLwazi neNgcaciso) ku-021 467 9322.

**ISAYINWE:** NGU-MS ABRAHAMS

**USEKELA MLAWULI-JIKELELE WOCWANGCISO LWEMFUNDO**

**UMHLA:** 2020-01-27



**SUMMARY OF REQUEST:**

**A. Directed to:**

**ITOPSCOM REF: WCED\_\_\_\_\_**

**Item No \_\_\_\_\_**

THE CHAIRPERSON

Departmental Information Technology Operational Committee (ITOPSCOM)

Western Cape Education Department

Att: The Secretariat, 19<sup>th</sup> Floor, Golden Acre, Cape Town

**B. Equipment/Services Required:**

Description/Details Of Items/Services Required	Contract/Item Cost
<b>TOTAL</b>	

**C. Motivation:**

1. Purpose and necessity for obtaining the equipment/services.

---

2. What improvement will the equipment or items bring about?

---

---

3. What is the intention with the old equipment? (Disposal Process)

**D. Applicant detail**

Name:

Rank:

Contact No:

e-Mail Address:

Component:

Signature: \_\_\_\_\_ Date:

**E. Recommendation by Directorate or Chief Directorate Head**

Recommendation/  
Comments:

\_\_\_\_\_

Name:

Rank:

Signature: \_\_\_\_\_ Date:

**F. Declaration by Program Manager**

Subject to the recommendations of the Committee, I authorise the acquisition of the above equipment in accordance with all relevant financial and procurement administration directives.

I certify that an amount of .....to cover this expenditure is included in the budget for the current financial year, under the following allocation as per **BAS codes**:

- FUND:**
- OBJECTIVE:**
- PROJECT:**
- RESPONSIBILITY:**
- ITEM:**
- REGIONAL IDENTIFIER:**
- ASSETS:**

The funding for the request will be paid from:

- Directorate's Own Budget
- Redesign Fund
- Technology Refresh
- No funding required (Access to Services e.g. Internet, Persal, etc)

.....  
Program Manager / Responsibility Manager  
**\*Note that District applications should be countersigned by the CD: Districts**

Date:

**G. Confirmation by:**

**ICT District Services Manager (For applications from EDO)  
Technology Manager (For applications from Corporate Users/Head Office)  
Technology Manager (For applications – schools)**

Confirmation: \_\_\_\_\_

**Name:**

**Signature:**

**Date:**

**H. Recommendation by Director: DGITO ECAS Cluster**

Recommendation/  
Comments:

\_\_\_\_\_

Name: MS. A. BASHA

Rank: Director: DGITO ECAS Cluster

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**I. Decision of IT Operational Committee**

Approved / Not approved / Comments: \_\_\_\_\_

Escalated to the IT STEERCOM as:

Non-Standard request

Above Threshold

\_\_\_\_\_

**Chairperson IT Operational Committee**

\_\_\_\_\_

**Date**

**J. Decision of the IT Steering Committee**

\_\_\_\_\_

**Chairperson IT Steering Committee**

\_\_\_\_\_

**Date**

## **Notes:**

1. It is the responsibility of the originator of the request to ensure that the correct application form is used, that it is completed correctly, signed by all of the relevant role-players, confirmation of funding is clear, it contains sufficient motivation of what the request is for, for who it is intended and why the requested ICT items or services are in fact required.
2. Additional information may be provided by way of annexures.
3. Ad-hoc applications will be only considered in extreme or urgent cases and must be presented directly to the Chairperson of the IT Operational Committee by the originator of the request.
4. Request for IT services and hardware from the EDO's must first be vetted by the relevant ICT Services managers in consultation with the relevant Technology Managers to ensure consistency of policies, guidelines and standards. This will avoid unnecessary delays and speed up applications to the ITOPSCOM.
5. Late applications will no longer be tolerated and must reach the Secretariat at least 7 days before ITOPSCOM meetings.
6. An indication of the estimated costs must be provided
7. The originator of the request must ensure that their Branch representative is present at the ITOPSCOM meeting in order to present their case, failing which the originator must attend the ITOPSCOM meeting to present the application.



**FILE REFERENCE:** 8/7/1/2/P/ICT STANDARDS/Version 8.6

**ENQUIRIES:** C. Conradie (021 483-0515) or N. Benjamin (021 483-2116)

## WESTERN CAPE GOVERNMENT

### ICT STANDARDS (Nov 2019)

#### Document Overview

This document serves as a means to communicate the Western Cape Government's (WCG) Information and Communication Technology (ICT) standards to its end-users and relevant stakeholders.

One of the reasons for developing the ICT standards is to facilitate quick ICT investment decision turn-around times as well as standardisation of ICT asset investments. This in turn supports the Centre for e-Innovation's drive to deliver excellent service and support to its client departments. A comprehensive list of benefits of standardisation is well documented in the IT Services Blueprint. The Enterprise Architecture Review Board is the custodian of the ICT standards and all requests for standardisation or deviation from the standard will have to be submitted to the review board for consideration and approval. A full business motivation for standardisation and or deviation must be attached to each application.

This document contains the following sections:-

- i. **Section 1:** List of ICT standards for the WCG corporate environment.
- ii. **Section 2:** List of ICT standards for the Western Cape schools.

Please note, you still need to engage with your ICT Services Manager for all your ICT requirements, to ensure that ICT equipment and services meet your business requirements. Also note that this list of standards will be updated on a regular basis as items are reviewed by the Enterprise Architecture Review Board and approved by the DDG: Ce-I.

# TABLE OF CONTENTS

SECTION 1: WCG ICT STANDARDS .....	3
OPERATING SYSTEMS .....	3
MICROSOFT PRODUCTS .....	3
SOFTWARE .....	4
PERSONAL COMPUTING DEVICES .....	6
ASSISTIVE SOFTWARE & HARDWARE ( <sup>5</sup> see note) .....	7
HARDWARE & PERIPHERALS .....	7
GENERAL.....	8
7.1 CISCO VALUE-ADDED RESELLER (VAR) for WCG .....	8
7.2 HP VAR for WCG .....	8
7.3 PC VAR's for WCG .....	8
7.4 OTHER:.....	8
ICT GOVERNANCE STANDARDS .....	9
SECTION 2: WESTERN CAPE EDUCATION (SCHOOLS ONLY).....	10
DESKTOP.....	10
NETWORK.....	10
PRODUCTIVITY SUITE.....	10
HARDWARE .....	10
1.1    END USER DEVICES.....	11
1.2    NETWORK & PERIPHERAL DEVICES .....	11
1.3    COMPONENT SPECIFICATIONS.....	12
SWITCHES .....	12
NETWORK STORAGE .....	12
OTHER.....	12
WARRANTIES .....	13
ANNEXURE A: FUTURE ICT STANDARDS .....	14
1.    PROOF OF CONCEPT (POC) .....	15
2.    PILOT.....	16
ANNEXURE B: ECM SCANNERS & PRINTERS.....	14



# SECTION 1: WCG ICT STANDARDS

## OPERATING SYSTEMS

<b>Workstation OS</b>	Windows 10 Enterprise Edition 64 bit (*see note)
<b>Server OS</b>	<ul style="list-style-type: none"> <li>• Ubuntu Linux Server LTS</li> <li>• Windows Server 2016 Standard</li> <li>• Windows Server 2016 Enterprise</li> </ul>
<p><sup>1</sup>Please note: Windows 10 is the WCG standard operating system for new machines, where any software/hardware incompatibility issues are found, compatible Departmental machines will be utilised.</p>	

## MICROSOFT PRODUCTS

DESKTOP	
<b>Productivity Software</b>	MS Office O365 ProPlus (*see note) MS Mix Plugin <b>Note: MS Access is excluded from standard installation. It requires approval via official channels.</b>
<b>Diagrams and flowcharts</b>	Microsoft Visio 2016
<b>Project Management</b>	Microsoft Project 2013 (v2010 SP3 to be used for BizProjects)
<b>E-mail:</b>	Microsoft Outlook 2016
<b>Collaboration Tool</b>	Microsoft Yammer 2016
<b>Communication Tool</b>	Microsoft Skype for Business 2016
<b>Cloud Based Storage</b>	Microsoft One Drive for Business 2016
<b>Anti-Virus Software</b>	Forefront Client Security
<p><sup>2</sup> Please note: MS Office O365 Pro Plus is the preferred standard, where any incompatibility issues are found, MS Office 2013 can be installed.</p>	
SERVER	
<b>Directory Services</b>	Windows Server 2008 R2 Active Directory
<b>Messaging</b>	Exchange Server 2013
<b>Configuration Manager</b>	System Centre Configuration Manager 2016
<b>Application Monitoring</b>	System Centre Operations Manager 2012 R2
<b>Data Protection</b>	System Centre Data Protection Manager 2010
<b>Host and application security</b>	<ul style="list-style-type: none"> <li>• Forefront Protection for Exchange Server 2010</li> <li>• Forefront Protection for SharePoint 2010</li> </ul>
<b>End user desktop Security</b>	Forefront Endpoint Protection 2010
<b>Identity Management</b>	Forefront Identity Management 2010 R2
<b>Web Security</b>	Forefront Threat Management Gateway 2010
<b>Relational DB Management System</b>	SQL Server 2016

<b>Virtualization</b>	<ul style="list-style-type: none"> <li>• Windows Server 2016 R2 Hyper-V</li> <li>• System Centre Virtual Machine Manager 2007</li> </ul>
<b>File Shares</b>	SharePoint 2010
<b>Document Security</b>	Rights Management Server (AD-RMS)
<b>3<sup>rd</sup> Party Access Solution</b>	Azure B2B
<b>Business Intelligence (BI)</b>	<ul style="list-style-type: none"> <li>• Microsoft BI Suite</li> <li>• Microsoft PowerBI</li> <li>• WebFocus (Only for WCED)</li> </ul>
<b>Customer Relationship Management (CRM) software</b>	Microsoft Dynamics (OracleCX in pilot phase)
<b>Internet applications and media experiences on the Web</b>	Microsoft Silverlight

## SOFTWARE

<b>Web Browser</b> ( <sup>3</sup> see note)	<ul style="list-style-type: none"> <li>• Edge</li> <li>• Internet Explorer 11</li> <li>• Google Chrome</li> <li>• Mozilla Firefox</li> </ul>
<b>Electronic document viewer</b>	Adobe Reader 15
<b>Integrated runtime for developers</b>	Adobe Air
<b>Media player plugin for web browser</b>	Adobe Flash
<b>Multimedia Design and Creative software</b>	<ul style="list-style-type: none"> <li>• Adobe Creative Suite (Creative Cloud)</li> </ul>
<b>Open and read secure EMC files</b>	Striata Reader
<b>Manage tax engagements with SARS</b>	e@syFile
<b>Mind Mapping</b>	Mind Manager 9.0
<b>Server Backup</b>	<ul style="list-style-type: none"> <li>• CA Disk Backup and Restore (Enterprise)</li> <li>• Legato (Data Centre)</li> </ul>
<b>Network Management</b>	Sintelligent Product Suite
<b>Telephone Management</b>	Proteus Telephone Management System
<b>Data Discovery and Mapping</b>	BMC ADDM
<b>Data Analysis and Statistical Software</b>	<ul style="list-style-type: none"> <li>• STATA</li> <li>• SPSS</li> </ul>
<b>Audit Analytics software</b>	ACL
<b>Enterprise Content Management (ECM)</b>	<ul style="list-style-type: none"> <li>• OpenText (Livelink) - All ECM components, including document management</li> <li>• J-Track (Document tracking)</li> </ul>
<b>Correspondence Tracking</b>	OpenText Correspondence Tracking Module
<b>Intranet: Web Content Management System and Portal</b>	OpenText Web Experience Management and OpenText Portal
<b>IT Service Desk</b>	BMC Remedy IT service management suite
<b>Application Packaging and Deployment</b>	AdminStudio Suite ( <sup>4</sup> see note)

<b>Web Content Management: Internet</b>	Drupal
<b>Online Survey tool</b>	Survey Monkey
<b>Enterprise Architecture tool</b>	Casewise (Archi in pilot phase)
<b>FTP Download Tool</b>	FileZilla
<b>Geographic Information System (GIS)</b>	ESRI ArcGIS (desktop and server)
<b>Business Process Management and Analysis</b>	iGrafx
<b>Terminal emulator for mainframe</b>	Winet
<b>BizProjects Reporting Tool</b>	Delivery Hub
<b>Enterprise Risk Management</b>	BarnOwl
<b>Digital Forensic Software Tools</b>	<ul style="list-style-type: none"> <li>• Intella Pro</li> <li>• Analyst Notebook</li> </ul>
<b>Issue and Bug Tracking System (for the Emergent Development Space)</b>	JIRA
<b>SharePoint &amp; EPM Monitoring Software</b>	Metalogix Diagnostic Manager
<b>Air dispersion modelling tools, and air quality management, validation and reporting</b>	<ul style="list-style-type: none"> <li>• CalPuff, Aeromod View</li> <li>• Envidas ARM Software</li> </ul>
<b>Poisons Information Database</b>	Afritox
<b>Disaster Management (Fire, Risk &amp; Hazards)</b>	Fireweb

<sup>3</sup> Please note: Edge and Internet Explorer 11 is the preferred standard for new installations, where any tested and proven incompatibility issues with software applications are found, Google Chrome and Mozilla Firefox may be requested.

<sup>4</sup> Please note: AdminStudio Suite is approved until the end of June 2019.

## PERSONAL COMPUTING DEVICES

WCG aligns to MIOS v6 and SITA's Technical Product Certification (TPC) process which prescribes profiles for personal computing devices. The table below represents the profiles WCG have standardised on. Additional profiles will only be added when a transversal business need is identified, investigated and found feasible. The hardware specifications listed within each profile are minimum requirements; procurement specifications must equal or be higher than listed specifications.

The Centre for e-Innovation (CeI) has a strict End User Compliancey Test, which tests devices against a predefined set of standards, to determine which models of end user devices can be supported and maintained on the WCG corporate network.

End user devices which have been issued with a SITA Product Certificate, has passed the WCG End User Compliancey Test and have been approved by the DDG: CeI via the Architecture Review Process are documented and managed in the WCG Product Catalogue which is available at: <https://mygov.westerncape.gov.za/services/it-policies-documents-and-forms>

The WCG Product Catalogue contains all the relevant procurement information and must be used in conjunction with the WCG standards list for procurement purposes. Only devices listed in the WCG Product Catalogue can be procured for use on the WCG network.

SITA Profile	Desktops				Notebooks			Tablets
	PC3	PC4	PC_AIO2	Note3	Note4	Note_WS1	Note_Tab1	
Item Name	Midrange PC	Advanced PC	Midrange AIO PC	Thin and light notebook	Midrange business notebook	Mobile technical workstation	Tablet/2-in-1 PC	
<b>CPU architecture</b>	X64 quad-core	X64 quad-core	X64 quad-core	X64 dual-core	X64 dual-core	X64 quad-core	X64 dual-core	
<b>CPU</b>	8th-generation or latest Intel Core i3	8th-generation or latest Intel Core i5	8th-generation or latest Intel Core i3	8th-generation or latest Intel Core i5	8th-generation or latest Intel Core i5	8th-generation or latest Intel Core i7	8th-generation or latest Intel Core i5	
<b>Memory</b>	8GB DDR-3	8GB DDR-3	8GB DDR-3	8GB DDR-3	8GB DDR-3	8GB DDR-3	8GB DDR-3	
<b>Disk</b>	500GB SATA	500GB SATA	500GB SSD	256GB SSD	256GB SSD	256GB SSD	256GB SSD	
<b>Video adaptor</b>	Integrated, upgradeable, digital output	Integrated, upgradeable, digital output	Discrete 1GB, dual-card support, OpenGL, digital output	Integrated, digital output	Integrated, digital output, discrete option	Discrete, 1GB, digital output, OpenGL	Integrated	
<b>Connectivity</b>	Gigabit	Gigabit	Gigabit	Gigabit, WiFi, Bluetooth	Gigabit, WiFi, Bluetooth	Gigabit, WiFi, Bluetooth	Gigabit, WiFi, Bluetooth	
<b>Screen Size</b>	19" LCD, 90+ ppi, anti-glare	21" LCD, 100+ ppi, anti-glare	21" LCD, 90+ ppi, anti-glare	12-14" LCD, 110+ ppi, anti-glare	14"+ LCD, 130+ ppi, anti-glare	14"+ LCD, 140+ ppi, anti-glare	11"+ multi-touch LCD, 110+ ppi	

## ASSISTIVE SOFTWARE & HARDWARE <sup>(<sup>5</sup>see note)</sup>

Voice Recognition Software	Dragon Dictate
Screen Reading/Magnification Software	<ul style="list-style-type: none"> <li>• Magic Magnifier/Reader</li> <li>• Zoomtext Magnifier/Reader</li> <li>• Jaws</li> <li>• Window-Eyes</li> </ul>
Optical Recognition (OCR) Software	Openbook
Braille Display	HIMS Braille Edge
Magnification Devices	<ul style="list-style-type: none"> <li>• Transformer HS CCTV Desktop Magnifier</li> <li>• ONYX Desktop HD 22" LCD</li> <li>• Ruby XL HD</li> </ul>
<p><sup>5</sup> Please note: Requests for assistive software and hardware must go via the ICT Services Manager in consultation with Jeremy Opperman (<a href="mailto:jeremy.opperman@westerncape.gov.za">jeremy.opperman@westerncape.gov.za</a>) before logging a call at the service desk.</p>	

## HARDWARE & PERIPHERALS

<b>Printers</b>	<ul style="list-style-type: none"> <li>• HP</li> <li>• Epson</li> <li>• Brother</li> <li>• Lexmark</li> </ul>	
<p>* Please see appendix A for Enterprise Content Management scanners. The scanners should be selected based on specific departmental/Component requirements.</p>		
<b>Bar Code printers</b>	<ul style="list-style-type: none"> <li>• SATO</li> <li>• Eltron (Zebra)</li> </ul>	
<b>Impact printers (dot matrix)</b>	Epson	
<b>Load Balancing</b>	F5	
<b>Routers</b>	Cisco	
<b>LAN Switches</b>	Cisco	
<b>Wireless Networking</b>	<ul style="list-style-type: none"> <li>• Cisco Aironet on LAN</li> <li>• Mikrotik – equipment and operating system (DoA only)</li> </ul>	
<b>Cabling</b>	<ul style="list-style-type: none"> <li>• AT &amp; T Systimax (AVAYA) (unshielded twisted pair)</li> <li>• ITT Canon/ISCS (shielded twisted pair) / Nexans Panduit</li> <li>• Cat6 as a minimum requirement</li> </ul>	
<b>Cabinets</b>	<ul style="list-style-type: none"> <li>• Modrac (Infrastructure)</li> <li>• HP (Servers)</li> </ul>	
<b>UPS</b>	<ul style="list-style-type: none"> <li>• APC</li> <li>• Huawei</li> </ul>	
<b>VOIP Phones</b>	Desk Phone	<ul style="list-style-type: none"> <li>• Polycom VVX201</li> <li>• Polycom VVX410</li> <li>• Avaya 9601</li> <li>• Avaya 9608</li> </ul>
	Conference Speaker Phone	Polycom SoundStation IP 5000
	Analogue VOIP Gateway	<ul style="list-style-type: none"> <li>• AudioCodes MP-112-4O-SIP 2fxo ports Gateway</li> <li>• AudioCodes MP-114-4O-SIP 4fxo ports Gateway</li> </ul>
	VOIP Switchboard	Interaction Desktop Software



# GENERAL

## 7.1 CISCO VALUE-ADDED RESELLER (VAR) for WCG

- The selected partner(s) must be at least a Cisco Certified GOLD partner, and be locally based in Cape Town.
- In accordance with this the WCG requires from a Cisco Gold partner to have the following minimum skills based in Cape Town:
  - Current technical Cisco certifications (to include at least 2 x CCIE). To provide the following details per CCIE based in Cape Town (Surname, Name, Certification date and CCIE number, Valid until, Specialization field)
- Registered Cisco Gold partners based within Cape Town, must have the following local Cisco specialization:
  - IP Telephony
  - Wireless LAN and WAN
  - Security
- Must at least have a Cisco shared support contract in place
- Must have direct access to Cisco technical support teams and programs

## 7.2 HP VAR for WCG

- In accordance with this WCG requires, from a HP partner, to have the following minimum certification in HP products, based in Cape Town:
  - Certified HP Partner
  - Servers – as per HP certified requirements.
  - Storage - as per HP certified requirements.
- Current HP certifications (technical resources) required from a selected partner(s). To provide the following details per resources based in Cape Town (Surname, Name, HP Certification Number, Date obtained, Validity, Specialization field)
- The locally HP selected partner(s) must have the following local HP specialization:
  - HP MASE (Master Accredited System Engineer ) – Servers and Storage
  - HP ASE (Accredited System Engineer) - Servers and Storage
  - HP AIS (Accredited Integration Specialist) - Servers and Storage

## 7.3 PC VAR's for WCG

- Lenovo
- HP
- Dell

## 7.4 OTHER:

- Any other specific WCG ICT equipment requirements need to be approved via the standard official channels.

## ICT GOVERNANCE STANDARDS

WCG will base its IT framework developments on the following best standard frameworks:

<b>Corporate Governance components in IT Governance</b>	King III [IoD]
<b>IT Governance Model</b>	<ul style="list-style-type: none"> <li>• The ISO 38500 [ISO/IEC] model</li> <li>• SANS 38500 model</li> </ul>
<b>Corporate governance of IT</b>	<ul style="list-style-type: none"> <li>• ISO 38500 [ISO/IEC]</li> <li>• SANS 38500</li> </ul>
<b>IT Governance Framework</b>	COBIT [ISACA]
<b>Data Management Framework</b>	DAMA
<b>IT Data &amp; Interoperability Standards</b>	Minimum Interoperability Standards for Government Information Systems (MIOS)
<b>IT Risk Management</b>	The Risk IT Framework [ISACA]
<b>IT Value Management</b>	The Val IT Framework [ISACA]
<b>IT Services Management</b>	ITIL [OGC]
<b>IT Security</b>	<ul style="list-style-type: none"> <li>• ISO 27k family of frameworks [ISO/IEC]</li> <li>• SANS 27k family</li> </ul>
<b>Enterprise Architecture</b>	<ul style="list-style-type: none"> <li>• TOGAF</li> <li>• GWEA (based on TOGAF)</li> </ul>
<b>IT Project Management</b>	<ul style="list-style-type: none"> <li>• PRINCE II</li> <li>• PMBOK</li> </ul>
<b>Business Process Modelling standard</b>	Business Process Model and Notation v2.0 (BPMN v2.0)

It is understood that

- These standards are for future implementation, to be worked towards as resources allow. Until such time the status quo will be retained. All new framework development and all major revisions of existing frameworks will be according to these standards, however.
- Frameworks will not necessarily be adopted as is. WCG will follow the "apply and explain" approach, adapting the frameworks for its own situation and explaining these adaptations in its own frameworks.
- The SANS and ISO frameworks are identical, but if differences should arise the SANS versions [South African] will receive preference.
- Where national government frameworks are implemented alongside the international best practice ones, the WCG frameworks will give preference to the national ones or explain why the best practice ones are preferred.

For new implementations preference will be given to the latest version of the best practice framework, but when new versions are implemented existing WCG frameworks based on the older version will be retained until a revision is justified.

## SECTION 2: WESTERN CAPE EDUCATION (SCHOOLS ONLY)

### DESKTOP

<b>Workstation OS</b>	Windows 10 Education
-----------------------	----------------------

### NETWORK

<b>Network OS</b>	<ul style="list-style-type: none"><li>• Windows Server 2019 / 2016 Standard Edition (Multipoint / CAT)</li><li>• Windows Server 2012 R2 Standard</li><li>• Windows Server 2008 R2 64bit Standard SP1 (Only where servers are incompatible with Windows Server 2012)</li></ul>
<b>E-mail</b>	Microsoft Outlook 2013 / 2016 / 2019 Microsoft Office 365  *Note: Email for teaching and learning is subject to schools choice and discretion.
<b>Anti-Virus Software</b>	<ul style="list-style-type: none"><li>• ClamWin Free Antivirus</li><li>• Microsoft Windows Defender (Windows 10 / Server 2016 only)</li></ul>
<b>Virtualization</b>	Microsoft Hyper-V Virtual Manager
<b>Directory Services</b>	Microsoft Active Directory
<b>Web Security</b>	<ul style="list-style-type: none"><li>• IPFire Opensource Firewall</li><li>• Forefront Threat Management Gateway (Legacy Systems)</li></ul>
<b>Wireless</b>	Min – 802.11G/N/AC
<b>Cabling</b>	Ethernet Min - CAT 5e, or CAT 6
<b>Cabinets</b>	Min 42U (see SLAN specifications)

### PRODUCTIVITY SUITE

<b>Office Software</b>	<ul style="list-style-type: none"><li>• MS Office Professional 2019 / 2016 / 2013 32 bit/64 bit</li><li>• MS O365</li></ul>
<b>Imaging Software</b>	Symantec Ghost Version 11 (Legacy) or 12 (UEFI Systems)
<b>Browsers</b>	<ul style="list-style-type: none"><li>• Edge</li><li>• Internet Explorer 11</li><li>• Chrome</li><li>• Firefox</li></ul>

### HARDWARE

The Centre for e-Innovation (CeI) has a strict Schools LAN Evaluation process, which tests devices against a predefined set of standards, to determine which devices models can be supported and maintained on the WCED Schools LAN.

The WCG Schools Product Catalogue contains all the relevant procurement information and must be used in conjunction with the WCG standards list for procurement purposes. Only devices listed in the WCG Schools Product Catalogue can be procured for use on the Schools LAN.



### 1.1 END USER DEVICES

The table below is a summary of the Value-added Resellers (VAR's) of end user devices for WCED Projects.

The device models and specifications which are supported from these VAR's are documented and managed in the WCG Schools Product Catalogue. Only end user devices that have been issued with a SITA Product Certificate, has passed the Ce-I Schools LAN Research and Development Evaluation and been approved by the DDG: Cel via the Architecture Review Process can be added to the catalogue.

Type	Description
<b>Basic, Presentation, eAdmin, Backup Workstation / Server for CAT, IT &amp; EGD(Schools)</b>	Lenovo Acer HP Dell Mustek / Mecer Pinnacle / Proline
<b>Notebooks (Schools)</b>	Lenovo Acer HP Dell Mustek / Mecer Pinnacle / Proline
<b>Chromebooks / Tablet Devices</b>	Not product specific based on specifications as outlined in the Component Specification Table.
<b>Mini / Micro Computers</b>	Intel Acer Lenovo Dell HP Mustek / Mecer Pinnacle / Proline

### 1.2 NETWORK & PERIPHERAL DEVICES

The table below is a summary of the Value-added Resellers (VAR's) of network and peripheral devices for WCED Projects.

The device models and specifications that are supported from these VAR's are documented and managed in the WCG Schools Product Catalogue. Only devices that have passed the Ce-I Schools LAN Research and Development Evaluation and been approved by the DDG: Cel via the Architecture Review Process can be added to the catalogue.

Type	Description
<b>1U File and Replacement Servers</b>	Intel Quad Core Xeon based Server
<b>UPS</b>	Min - 1000VA On-line USB
<b>Printers / Scanners</b>	Brother, Epson, Lexmark, HP
<b>Switches and Wireless AP's</b>	D-Link, Xirrus, Cisco
<b>Projectors</b>	Epson, BenQ, Acer, InFocus
<b>Smartboard &amp; Imaging Devices</b>	Mimio, Smarttech, Epson

### 1.3 COMPONENT SPECIFICATIONS

Component	Recommended	High-end	Notes
<b>Processor</b>	<b>Workstation / Notebook / MiniPC / Tablet / Handheld:</b> Latest intel / ARM based desktop or mobile processor	<b>Workstation / Notebook / MiniPC / Tablet / Handheld:</b> Latest intel / ARM based desktop or mobile processor	<ul style="list-style-type: none"> <li>Processor capability varies between notebooks and workstations</li> <li>Processors with vPro capability preferred but not required</li> </ul>
<b>Chipset</b>	<b>Workstation / Notebook / MiniPC / Tablet / Handheld:</b> Latest intel / ARM based desktop or mobile chipset		<ul style="list-style-type: none"> <li>Chipset with vPro capability (Intel Only) preferred but not required</li> </ul>
<b>Memory</b>	<b>Laptops/ Tablets (Mid to High) /Desktops / MiniPC</b> 4GB	8GB (or higher for Windows 10-64bit)	Only consider going beyond 4GB if planning on going 64Bit
	<b>Handheld/Tablets (low spec)</b> 3GB		
<b>Disk</b>	500GB Hard Drive / 128GB (min) SSD (Desktop / Laptop / MiniPC / Tablet)	500GB Hard Drive / 128GB (min) SSD (Desktop / Laptop / Tablet / MiniPC)	
	64GB+ handheld / Low spec Tablet		
<b>Video adaptor</b>	4GB (if not on-board graphics) or higher	Depends on specific user needs	DirectX 12 (min) with Windows Display Driver Model (WDDM) 1.3 or Higher
<b>Optical drive (Server / Desktops / Laptop)</b>	DVD Writable	DVD Writable	DVD Writable
<b>Out of Band Management</b>	vPro (Desktops / Laptop)		
<b>BitLocker / Similar</b>	TPM (Microsoft based Devices)		Trusted Platform Module is used to authenticate hardware devices on a hardware level

### SWITCHES

Devices must be SITA Certified, evaluated by CEI Schools LAN Research and Development and available on the WCG Schools Product Catalogue

### NETWORK STORAGE

Devices must be SITA Certified, evaluated by CEI Schools LAN Research and Development and available on the WCG Schools Product Catalogue

### OTHER

Any other specific WCG Schools ICT equipment requirements must be approved via the standard official channels.

## WARRANTIES

### Recommendation from the WCG Ce-I is that:

- All hardware procured must include a 3-year warranty (NOT OPTIONAL) on-site support. This will minimize out-of-warranty issues and trigger auto-refresh for departments thereby improving user productivity and Ce-I service delivery.
    - **Servers** - All new WCG servers (excl. Schools Networks) need to be purchased standard with a 3-year onsite warranty (next business day response).
    - **Routers** – All new WCG routers (excl. Schools Networks) need to be purchased standard with a 3-year onsite warranty.
    - **LAN Switches** – All new WCG switches (excl. Schools Networks) need to be purchased standard with a 3-year onsite warranty.
- 
- 

APPROVED



HR ARENDSE

DEPUTY DIRECTOR GENERAL: CENTRE FOR E-INNOVATION

Date:

2019-11-12

## ANNEXURE A: ECM SCANNERS & PRINTERS

	SCANNING SPEED @ 200DPI B/W	ADF CAPACITY	RECOMMENDED DAILY VOLUME (MAX)	MINIMUM DOCUMENT SIZE	Output Resolution	Imprinting	Notes
<b>Kodak i3200</b>	60 ppm, DUPLICATE	150	15 000	A3	COLOUR/GREYSCALE/B&W (DPI) 1200 dpi	Post scan (Optional Attachment)	High volume
<b>Kodak i3400</b>	80 ppm	250	20 000	A4	landscape, letter/A4 size, black and white/ grayscale/ colour) 1200 dpi	Optional	High volume
<b>Fujitsu Image Scanner FI- 6670</b>	90 ppm	200	15 000	A3	600 DPI	YES (Optional Attachment)	High volume scanning
<b>Fujitsu Image Scanner FI- 7180</b>	80ppm	80	6 000	216 mm x 355.6 mm (8.5 in. x 14 in.)	Colour (24-bit), Grayscale (8-bit) 50 to 600 dpi	YES (Optional Attachment)	Ideally suited for desktop scanning applications
<b>FUJITSU Image Scanner ScanSnap S1100i</b>	up to 8 ppm	1		A4	600 dpi	No	Very light and USB powered mobile scanner.

## ANNEXURE B: FUTURE ICT STANDARDS

This section includes all **ICT proof of concepts (POC)** and **pilots** that have been approved for future implementation, as well as the proposed implementation period. WCG follows an ICT Value Chain approach which enables WCG ICT investments to deliver outputs that enable the delivery of stakeholder benefits at optimal value. The diagram below is a graphical view of the WCG ICT Value Chain, for more detail, please refer to the WCG ICT Value Chain v1.0 document.

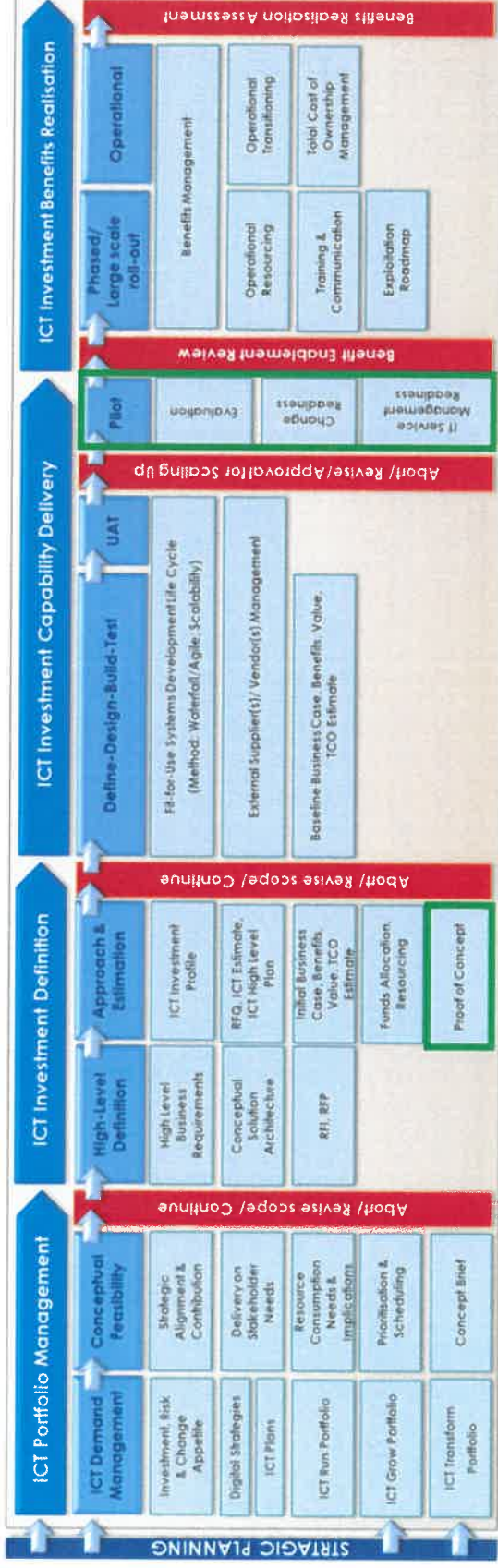


Figure 1: WCG ICT Value Chain

### 1. PROOF OF CONCEPT (POC)

The WCG ICT Value Chain specifies that a proof of concept (POC) be done as part of the ICT Investment Definition stage. A POC is the realization of a certain method or idea to demonstrate its feasibility and to verify that some concept or theory has the potential of being used. A proof of concept is usually small and may or may not be completed.

Business Need	Solutions	Department	Requester	Duration
Application & Data Integration	Microsoft Azure Integration Services (IOP)	DoIP: TAPS	Mr A Kader / U Hendricks	11/2019 – 03/2020
Data Accessibility and Data Access Control (LDW)	Microsoft SQL Server 2019 / Denodo Platform 7.0 – Logical Data Warehouse (LDW)	DoIP: TAPS	Mr A Kader / U Hendricks	11/2019 – 03/2020



## 2. PILOT

The WCG ICT Value Chain specifies that a pilot roll-out be done as part of the ICT Investment Capability Delivery stage. A pilot project refers to an initial roll-out of a system into production, targeting a limited scope of the intended final solution. The scope may be limited by the number of users who can access the system, the business processes affected, the business partners involved, or other restrictions as appropriate to the domain. The purpose of a pilot project is to test the solution in a controlled production environment.

Business Need	Solutions	Department	Requester	Duration
Rebuild of GIS Location Services	MS Azure	DotP: EGA	Mr B Heald	07/2018 -12/2019
Citizen Relationship Management (CRM)	OracleCX Suite	DotP, DHS, TPW, DSD	Ms N Mngqibisa	11/2018 – 03/2020
Bulk messaging to Learners	MS Kaizala	WCED: Communications	Ms B Hammond	01/2019 – 06/2019
EA Repository	Archi	DotP: ICT P&D	Mrs C Conradie	03/2019 – 12/2019
Master Data Management	MS Master Data Services (MDS)	DotP: TAPS	Mr H Jacobs	11/2019 – 03/2020