



Save the Children

IT/SECURITY TELECOMS/RENEWABLE ENERGY MINIMUM REQUIREMENTS

Save the Children International
Global Technology Team



[Savethechildren.org](https://www.savethechildren.org)

Registered charity England and Wales (213890) Scotland (SC039570)



Functional Area:	Global Technology Team
Owner (Name + Position):	Gerald Waterfield Director IT Global Operations
Approved by:	Rajat Juneja Director Enterprise Architecture & Data Analytics
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BACKGROUND

Save the Children International is an International Charity that is heavily regulated and as such must be compliant to all regulations as laid out by the regulators and donors. These include but are not limited to GDPR and Cyber Essentials Certification which require us to meet minimum cyber standards as laid out by the UK Government. In addition to compliance needs we have a strict Enterprise Architecture Strategy to drive value and efficiency whilst optimising and simplifying our Technology estate to meet our 2030 Corporate Ambition.

PURPOSE

In order to comply with Save the Children International Global IT Policies and Procedures and meet required external compliance this document provides an outline of the minimum Technology Standards required for all new Services, Platforms and Hardware to be permitted to be used within the organisations technology estate. As these are “Minimum Standards” it is permissible to source equipment where these standards are exceeded. When sourcing higher specifications, that SCI is getting the best value for money and that the higher specification can be justified.

INTENDED AUDIENCE

External

Software Vendors, Hardware Vendors, Service Providers, Government and Business partners.

Internal

All Save the Children international employees seeking to replace existing equipment/services or procure new equipment or services.

Scope

Field Offices, Country offices, Regional Offices and the Centre.



PLATFORM SERVICES		
APPLICATION SERVERS		
Recommended		Acceptable
Operating System	Windows Server 2019	Windows Server 2016
Application Server Version	IIS 8.5 For windows servers	
Application Memory Requirements	8GB	
Application CPU Requirements	2 vCPUs	
File Servers		
Recommended		Acceptable
Operating System	Windows Server 2019	Windows Server 2016
Application Memory Requirements	8GB	
Application CPU Requirements	2 vCPUs	
Web Servers		
Recommended		Acceptable
Operating System	Windows Server 2019	Windows Server 2016
Web Server Version	IIS 8.5 OR Later (For windows servers)	
Application Memory Requirements	8GB	
Application CPU Requirements	2 vCPUs	
Database Servers		
Recommended		Acceptable
Operating System	Windows Server 2019	Windows Server 2016
Db Server Version	SQL Server 2019	SQL Server 2016
Application Memory Requirements	32GB	
Application CPU Requirements	8 vCPUs	
Cloud (IaaS/ PaaS)		
Recommended		Acceptable
Operating System	Azure IAAS, Azure PAAS	Azure IAAS, Azure PAAS
Desktop Computer		
Recommended		Acceptable
Manufacturer	HP	Lenovo or any suitable brand not subjected to sanctions.
Operating System	Windows 11 Enterprise	Windows 11 Professional
Hardware Standard	i5 CPU, TPM 2.0 compatible with SecureBoot (supports Bitlocker encryption), 12 GB Ram, 512 SSD Hard Drive	
Models	HP Elite desk preferred.	
Functional Characteristics	3-year warranty mandatory	
Laptop Computer		
Recommended		Acceptable
Manufacturer	Lenovo	Any suitable brand not subjected to sanctions. Dell not permitted due to battery issues.
Operating System	Windows 11 Enterprise	Windows 11 Professional
Hardware Standard	i5 CPU TPM 2.0 compatible with SecureBoot (supports Bitlocker encryption) 12 GB Ram 512 SSD Hard Drive built in Wi-Fi connectivity	
Models	T or X series (Current model as supplied via the global framework agreement)	
Functional Characteristics	3-year warranty and inline surge protector is mandatory	



MOBILE DEVICES (tablets and smart phones)		
Recommended		Acceptable
Manufacturer	Samsung, Motorola, Apple (BYOD Only)	Any brand with the exception those subject to sanctions
Operating System	Android 12.0 or later, iOS 15 or later	iOS 13 or later Android 10.0 or later Windows phone (Members)
Minimum application memory & CPU Requirements	RAM 4GB / Storage 32GB/ Speed 1.4GHz / Architecture 64 bit	
Virtual Private Network		
Recommended		Acceptable
Manufacturer	Zscaler Azure (Microsoft)	
Model	FortiGate VPN Feature Azure P2S VPN Azure S2S (IPSEC) VPN	
Version	4.1.0.98 or later	
Functional Characteristics	<ul style="list-style-type: none"> A high Internet speed connection is needed for the Full SSL VPN Connections (Min 20 Mbps). 	
Virtual Private Network Client		
Recommended		Acceptable
Software	ZIA (Zscaler) client. Azure VPN Client	
Application Memory Requirements	8GB	
Application CPU Requirements	4.2 GHZ or better	
Functional Characteristics	Mandatory install on all end user computers	
Cyber And Information Security Services		
Firewall		
Recommended		Acceptable
Manufacturer	Meraki MX Series	Any IPSEC router compatible with Zscaler
Model	All models where EOS is later than 2027	
Version		
Functional Characteristics	Good quality firewall needed for sites hosting services. Otherwise a good quality router needed to manage connectivity.	
Access Points		
Recommended		Acceptable
Manufacturer	Cisco Meraki	Cisco Meraki
Model	All models with EOS date later than 2028	
Version		
Functional Characteristics	<ul style="list-style-type: none"> Next generation AP with Wi-Fi 6 technology. Ideal for ultra-high density and performance deployments. Security radio and BLE included Radio specification: 1 × 2.4 GHz 802.11b/g/n/ax 1 × 5 Ghz 802.11a/n/ac/ax 1 × WIDS/WIPS 1 × Bluetooth 5.9 Gbit/sec max rate 8×8:8 MU-MIMO with beamforming Interface: 1 × 5 Gbps Multigigabit Ethernet port Power: 802.3at PoE or DC power adapter 	<ul style="list-style-type: none"> Next generation, entry-level high-performance Wi-Fi 6 AP with security scanning radio and BLE included Radio specification: 1 × 2.4 Ghz 802.11b/g/n/ax 1 × 5 GHz 802.11a/n/ac/ax 1 × WIDS/WIPS 1 × Bluetooth 1.7 Gbit/sec max rate 2×2:2 MU-MIMO with beamforming Interface: 1 × Gigabit Ethernet port Power: 802.3af PoE or DC power adapter



DIRECTORY SERVICES / AUTHENTICATION		
Recommended		Acceptable
Software	Azure Active Directory compatible via SAML 2.0	Azure Active Directory compatible via OAuth 2.0
Functional Characteristics	Used for Single Sign On with Office365 for Applications	
Antivirus		
Recommended		Acceptable
Software	Falcon CrowdStrike - Latest version	Windows Defender - Latest version
Application Memory Requirements	4 GB RAM	
Application CPU Requirements	Intel Pentium 4 2 GHz or higher	
Functional Characteristics	Cloud Managed, Computer Protection Premium & Rapid Detection and Response	
End User Computing Services		
Web Browsers		
Recommended		Acceptable
Browser	Chrome, Microsoft Edge	Safari, Mozilla Firefox
Version	Current	Current -1
Virtual Desktop		
Recommended		Acceptable
Software	Citrix Cloud	Citrix XenApps 1912, Citrix XenDesktop 1912
Application Memory Requirements	4 GB per User	
Application CPU Requirements	4 vCPUs	
Functional Characteristics	1 X Virtual Server per 20 users	
Communications & Channel Access Services		
Collaboration Tool		
Recommended		Acceptable
Software	Microsoft Teams	Microsoft Teams
Application Memory Requirements	8 GB RAM	
Application CPU Requirements	4.2 GHz or faster, 2 core	
Sms - Gateway		
Recommended		Acceptable
Manufacturer	Twilio Africa's Talking	Direct mobile operators in-country VIAMO
Version		
Sms - Software		
Recommended		Acceptable
Software	Twilio Africa's Talking	RapidPro (Hosted by TextIt/ONA) VIAMO
Radio		
Recommended		Acceptable
Manufacturer	Motorola for VHF Codan for HF	Motorola for VHF Codan for HF
Model	Motorola DP 4600 and DM 4600 series for VHF vehicle, base and portable stations. Motorola SLR5500 VHF Repeater (Technical approval required before purchase from centre IT experts) Codan Envoy series for Mobile and Base HF stations	
Version	Latest firmware	



Mobile Satellite Solutions (Data and Voice)		
Recommended		Acceptable
Manufacturer	Thuraya Iridium Inmarsat	No other Satcoms are permitted for use.
Model	Thuraya - XT, XT Lite, X5 Touch & Thuraya IP (Hughes models) Iridium - Iridium Extreme, Iridium Extreme PTT, Iridium 9555, Icom-Sat100 & Icom Sat 100M Inmarsat - GX series, Cobham BGAN (All models), IsatPhone2	
Version	Latest firmware	
Celular Gateways		
Recommended		Acceptable
Manufacturer	Cisco Meraki	CradlePoint
Model	Meraki MG series (any)	W1850 (5G) & IBR series
Version	Latest firmware	
Functional Characteristics	To be used with Local SIM Cards for internet access.	
Point To Point Links		
Recommended		Acceptable
Manufacturer	Ubiquity	Ubiquity
Model	Ubiquiti NanoBeam 5AC Gen2 - NBE-5AC-Gen2	
Version	Latest firmware	
Functional Characteristics	Only for Point to point links up to 10kms distance (BAU or Emergency Response in most cases), not for Access Point usage	
End User Productivity Tooling Services		
Productivity Tools		
Recommended		Acceptable
Software	Microsoft 365 E3 Subscription	Microsoft 365 E3 Subscription
Application Memory Requirements	8 GB RAM	
Application CPU Requirements	4.2 GHZ or faster x86 or 64-bit processor with SSE2 instruction set	
Visual Collaboration		
Recommended		Acceptable
Software	MURAL	MURAL
Functional Characteristics	MURAL is a HTML5 web application and works best with Chrome, but we also support Edge, Firefox and Safari.	
Application Memory Requirements	MURAL for windows requires a minimum of 16gb RAM	
Electrical		
Personal solar systems		
Recommended		
Manufacturer	Voltaic systems (voltaicsystems.com)	
Models	Full range of portable kits designed for charging phones, tablets and laptops and personal lighting systems.	
Notes	Voltaic products available via the Planson FWA	
Site Solar System (Core components)		
Recommended		
Manufacturer	Victron Energy	
Models	Cerbo GX (IOT central CPU). All MPPT technologies, All inverter/chargers, accessories, solar panels, and batteries	
Notes	The Cerbo GX, MPPT and Inverter/Chargers must be used as core solar system components. Alternative brands are permissible for batteries and solar panels. All Victron components must be IOT compatible (i.e., Smart)	

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Global Connectivity Standard

SCI is a “Cloud First” organisations, therefore adequate bandwidth so that user experience with cloud services is good. To provide a good UX, the following minimum standard must be met for connectivity.

- **Bandwidth will be treated as Synchronous i.e. the Kb/Sec will apply equally for upload and download**
- **For home users the KPI will be 1Mb/sec (after contention ratio is considered)**
- **Minimum standard (Mandatory) set to 250Kb/sec per user in an office environment. (Amber)**
- **Recommended KPI set at 350 kb/sec (stretch target) (Green)**
- **Add baseline minimum of 1Mb/sec for all sites up to 3 users**
- **1Mb to be added to site KPI if operating guest networks per 10 guests.**

Examples:

Site A: Small office

Staff: 2 750Kb/Sec

Guest: 0

Mandatory Provision 1Mb (minimum level)

Stretch Provision 1.1Mb

Site B: Medium office

Staff: 20 5Mb

Guests: 10 1Mb

6Mb

8MB

Note: Speed testing should be carried out on a regular basis to validate the ISP is providing the correct service. For more information, refer to the [Speed testing Guide on OneNet](#)