

## Annex 2 – Scope of work

### Paper Based Testing Venue Requirements

#### 1 Facilities:

- 1.1 Venue Owner shall:
  - 1.1.1 provide Venue(s) for the use of the British Council for the duration of each Session;
  - 1.1.2 provide Venue(s) which shall include three (3) separate areas: i) an area for Candidates to wait in advance of the Exam Sitting (“**Candidate Waiting Area**”); ii) an area for checking in Candidates and monitoring exams (“**Exam Administrator Area**”); and iii) a secure room in which Candidates sit the exams (“**Exam Room**”). For the avoidance of doubt, the Candidate Waiting Area and Exam Administrator Area may be in the Exam Room but within distinct separate areas of the same;
  - 1.1.3 provide Exam Rooms with networked computer equipment in-situ as set out at Schedule 4 (Technical & Technical Support Requirements);
  - 1.1.4 ensure that all Servers supporting CB examinations are maintained on the venue premises in a secure room with restricted and controlled access;
  - 1.1.5 ensure that the networked computer equipment’s Microsoft operating licences are original and valid for the duration of any of the Sessions;
  - 1.1.6 provide to the British Council and/or the Application Provider a copy of the Microsoft activation message window for the machine being used as a server;
  - 1.1.7 ensure that the branded signage provided by the British Council is clearly identifiable for Candidates;
  - 1.1.8 provide Venue(s) that is/are close to local travel facilities with disabled access to the building;
  - 1.1.9 ensure a disabled toilet is clean and available within each Venue;
  - 1.1.10 ensure clean and available, separate male and female toilets within each Venue;
  - 1.1.11 ensure that all Venue compliance certification is appropriately displayed including Fire Safety and relevant Health & Safety;
  - 1.1.12 ensure that all fire exits are clearly marked and fire extinguishers are checked and in sight within the Venue;
  - 1.1.13 ensure that there are clear instructions regarding fire evacuation processes which are visible within the Venue;
  - 1.1.14 provide fire detection equipment and alarms within the Venue(s);
  - 1.1.15 ensure that the Exam Room has secure access for authorised Test Day Personnel and Candidates during the exam;
  - 1.1.16 ensure all Exam Rooms are located away from areas of high footfall or noise, or where training is being conducted;
  - 1.1.17 ensure that each Venue has smoke detection, fire alarm, emergency lighting in the event of a power failure, and clearly signed access to appropriate fire extinguishers / equipment;
  - 1.1.18 ensure that each Venue has emergency evacuation arrangements and routes that are: clearly indicated (signage), lit, clear of obstructions, with

- unlocked / easy to open exit doors, and that lead to a safe external assembly point. Evidence of a regular evacuation check must be provided;
- 1.1.19 ensure that the Exam Room has secure access for authorised Test Day Personnel and Candidates during the exam;
  - 1.1.20 ensure all Exam Rooms are located away from areas of high footfall or noise, or where training is being conducted;
  - 1.1.21 ensure all Exam Rooms have adequate spacing between desks or partitions to prevent cheating. The minimum distance between the edge of one screen and the edge of the next is 1.25 meters unless the monitors are positioned back to back or separated by dividers. If using partitions, these must be both high and long enough on all sides to prevent Candidates from seeing each other's screens. Any such partitions must be sturdy so as not to fall over during any Exam Sitting. If privacy filters are used, Venue Owner will need to ensure that it is not possible for Candidates to see each other's screens;
  - 1.1.22 provide Exam Rooms which have a controlled, comfortable temperature with air conditioning and/or heating systems as appropriate;
  - 1.1.23 ensure a working clock, in a highly visible location within Exam Rooms;
  - 1.1.24 provide desks with a suitable adjustable chair for each Candidate within Exam Rooms;
  - 1.1.25 provide a desk for the test administrator which will be positioned at the front of Exam Rooms, facing the Candidates;
  - 1.1.26 ensure that Exam Rooms have adequate lighting and window coverings that prevent screen glare; and
  - 1.1.27 provide to the British Council, or its authorised representatives, a completed, signed Daily Setup Checklist in the form set out in Schedule 5 (or as otherwise provided by the British Council from time to time) for each day of a Session.
  - 1.1.28 provide mineral water (19 Litre with dispenser or 500ML bottle) for all candidate and staff members to be provided, as confirmed by The British Council;
  - 1.1.29 provide disposable cups for water; and
  - 1.1.30 provide tea/coffee/snacks refreshments to British Council designated staff (venue staff and/or Examiners).

## 2 **General Security:**

- 2.1 Venue Owner shall:
  - 2.1.1 provide the Exam Administrator Area which shall be a clearly defined space or room (if available), outside (or inside, but in its own designated area) of the Exam Room for Candidates to be registered and their identity to be checked. This space must be adequate for the number of Candidates registered (as notified to Venue Owner by the British Council) and for the Test Day Personnel to carry out the registration/exam administration procedures;
  - 2.1.2 in the Candidate Waiting Area (or area adjacent to it), provide secure storage for Candidates' belongings (e.g. mobile phones). This storage space must be sufficient for the number of Candidates attending each Exam Sitting. For the avoidance of doubt this may be outside or inside of the Exam Room;

- 2.1.3 provide secure storage for British Council staff (including Test Day Personnel) belongings (e.g. mobile phones); and
- 2.1.4 ensure that each Venue is aware that the End Client (and, where applicable, its clients) may send an examination and/or security auditor (or auditors) to audit any Exam Sitting during any Session and ensure that any such examination auditor(s) is/are assisted as necessary and escorted to their chosen Exam Sitting without delay.

### 3 **Data Security**

#### 3.1 Venue Owner shall:

- 3.1.1 comply with its obligations under clause 9 of Schedule 1;
- 3.1.2 provide a secure Local Area Network and secure internet connectivity;
- 3.1.3 Ensure comprehensive coverage of customer journeys, routes and points, including but not limited to, such perimeters, parking lots, and storage spaces, walkways, hallways, Internal and external building spaces and other relevant zones, through the use of CCTV surveillance. These surveillance systems should ensure the capture of clear and identifiable images whenever needed. Recordings, footages, or clips should be retained for a period ranging between 60 to 90 days;
- 3.1.4 ensure that the correct system protection is in place so that:
  - (i) the Application Provider's software is not vulnerable to malicious 3<sup>rd</sup> party activity or virus;
  - (ii) the End Client's CBT questions are not vulnerable to malicious 3<sup>rd</sup> party activity or virus;
  - (iii) the CBT Data are not vulnerable to malicious 3<sup>rd</sup> party activity or virus; and
  - (iv) any other data provided under this Agreement are not vulnerable to malicious 3<sup>rd</sup> party activity or virus.

3.2 Venue Owner shall not, unless and until notified by the British Council, remove, delete, re-image or extract any data from any server supporting CBT.

3.3 Venue Owner shall allow the British Council, the Application Provider, and/or any third party authorised by the British Council or the End Client access to the Venue and/or remote access to its CBT supporting server(s) in order to allow:

- 3.3.1 extraction of CBT Data; and/or
- 3.3.2 cleansing of CBT Data.

### 4 **Technology**

#### 4.1 Venue Owner shall:

- 4.1.1 ensure the Venue can meet the minimum technical requirement as set out in Schedule 4 (Technical and Technical Support Requirements) and in Schedule 6 (Order Form);
- 4.1.2 inform the British Council of any plans to upgrade or change its systems or IT equipment as set out in Schedule 1, Clause 5.2; and
- 4.1.3 ensure the Venue's experienced technician is available on site at the Venue, and able to communicate in English with sufficient fluence to work with the

Application Provider to ensure the Application Provider's software installation and testing is successful.

## 5 Other Requirements

### 5.1 Venue Owner shall ensure that:

5.1.1 the Venues are and will remain available for each Exam Sitting during the Session(s) with particular attention to ensuring that:

- (i) there are no planned Fire Drills timetabled during an Exam Sitting;
- (ii) there is no existing and/or any new cause or action being instigated against the Venue which may prevent or impede access to the Venue; and
- (iii) any potential change, or change, of Control taking place ahead of the relevant Exam Sitting is notified to the British Council immediately on Venue Owner becoming aware of such change;

5.1.2 all national and local requirements applicable to the Venue are met including those regarding insurance, fire and safety; and

5.1.3 no Venue will fall into insolvency, receivership or be at risk of any financial failure during the Term.

### 5.2 Venue Owner shall ensure that it provides the British Council with details of which Venues meet which of the following ISOs and/or any local equivalents (as updated from time to time):

5.2.1 **ISO 9001** Quality Management (2003)

5.2.2 **ISO 10002** Customer Satisfaction and Complaints Handling (2006)

5.2.3 **ISO 14001** Environmental Management (2006)

5.2.4 **ISO 27001** Information & Data Security (2008)

5.2.5 **ISO 23988** Use of IT in the delivery of assessments (2013)

5.2.6 **ISO 22301** Business Continuity (2015)

# Computer Based Testing Venue Requirements

## CBT Venue Requirements

1

### **Facilities:**

- 1.1 Venue Owner shall:
  - 1.1.1 provide Venue(s) for the use of the British Council for the duration of each Session;
  - 1.1.2 provide Venue(s) which shall include four (3) separate areas: i) an area for Candidates to wait in advance of the Exam Sitting ("**Candidate Waiting Area**"); ii) an area for checking in Candidates and monitoring exams ("**Exam Administrator Area**"); and iii) a secure room in which Candidates sit the exams ("**Exam Room**"); iv) Parents waiting area that is neat and tidy ("**Parents Waiting Area**"), the Candidate Waiting Area and Exam Administrator Area may be in the Exam Room but within distinct separate areas of the same;
  - 1.1.3 provide the hall/room for Arts Exam for number of days required to maintain confidentiality;
  - 1.1.4 provide the hall/room to conduct paper-based exams in sessions – AM and PM. The venue is required from 7:00 am till 6:00 pm for all exams except EDEXCEL where the venue is required for three sessions, from 7:00 am till 9:00 pm. For IELTS, the venue is required from 8:00 am to 6:00 pm.
  - 1.1.5 provide Lab for Practical Exams to host science practical exams (Chemistry, Biology and Physics);
  - 1.1.6 ensure that the Practical Lab is equipped with required equipment;
  - 1.1.7 provide trained resources to support and conduct practical exams;
  - 1.1.8 provide Exam Rooms set up in accordance with British Council's specifications;
  - 1.1.9 ensure that the branded signage provided by the British Council is clearly identifiable for Candidates;
  - 1.1.10 provide Venue(s) that is/are close to local travel facilities with disabled access to the building;
  - 1.1.11 ensure a disabled toilet is clean and available within each Venue;
  - 1.1.12 ensure clean and available, separate male and female toilets within each Venue;
  - 1.1.13 ensure that all Venue compliance certification is appropriately displayed including Fire Safety and relevant Health & Safety;
  - 1.1.14 ensure that all fire exits are clearly marked and fire extinguishers are checked and in sight within the Venue;
  - 1.1.15 ensure that there are clear instructions regarding fire evacuation processes which are visible within the Venue;
  - 1.1.16 provide fire detection equipment and alarms within the Venue(s);
  - 1.1.17 ensure that the Exam Room has secure access for authorised Test Day Personnel and Candidates during the exam;

- 1.1.18 ensure all Exam Rooms are located away from areas of high footfall or noise, or where training is being conducted;
- 1.1.19 ensure all Exam Rooms have adequate spacing between desks or partitions to prevent cheating. The minimum distance between the edge of one desk and the edge of the next is 1.25 meters. If using partitions, these must be both high and long enough on all sides to prevent Candidates from seeing each other's work. Any such partitions must be sturdy so as not to fall over during any Exam Sitting;
- 1.1.20 provide Exam Rooms which have a controlled, comfortable temperature with air conditioning and/or heating systems as appropriate;
- 1.1.21 ensure a working digital clock (2ft x 2ft), in a highly visible location within each Exam Room;
- 1.1.22 provide desks with a suitable adjustable chair for each Candidate within each Exam Room;
- 1.1.23 provide a desk for the test administrator which will be positioned at the front of each Exam Room, facing the Candidates;
- 1.1.24 ensure that each Exam Room has adequate lighting and window coverings; and
- 1.1.25 provide to the British Council, or its authorised representatives, a completed, signed Daily Setup Checklist in the form set out in Schedule 5 (or as otherwise provided by the British Council from time to time) for each day of a Session.
- 1.1.26 provide mineral water (19 Litre with dispenser or 500ML bottle) for all candidate and staff members to be provided, as confirmed by The British Council; and
- 1.1.27 provide disposable cups for water

## 2 **General Security:**

- 2.1 Venue Owner shall:
  - 2.1.1 provide the Exam Administrator Area which shall be a clearly defined space or room (if available), outside (or inside, but in its own designated area) of the Exam Room for Candidates to be registered and their identity to be checked. This space must be adequate for the number of Candidates registered (as notified to Venue Owner by the British Council) and for the Test Day Personnel to carry out the registration/exam administration procedures;
  - 2.1.2 in the Candidate Waiting Area (or area adjacent to it), provide secure storage for Candidates' belongings (e.g. mobile phones). This storage space must be sufficient for the number of Candidates attending each Exam Sitting. For the avoidance of doubt this may be outside or inside of the Exam Room and the belonging area must be covered under CCTV surveillance from all corners;
  - 2.1.3 provide secure storage for British Council staff (including Test Day Personnel) belongings (e.g. mobile phones); and
  - 2.1.4 ensure that each Venue is aware that the End Client (and, where applicable, its clients) may send an examination and/or security auditor (or auditors) to audit any Exam Sitting during any Session and ensure that any such examination auditor(s) is/are assisted as necessary and escorted to their chosen Exam Sitting without delay.

2.1.5 Provide handheld metal detectors as per the need of the examination staff.

### 3 **Data Security**

3.1 Venue Owner shall:

3.1.1 comply with its obligations under clause 9 of Schedule 1;

3.1.2 ensure that the correct system protection is in place so that any data, including any electronically transmitted PBT Data or PBT questions, provided under this Agreement are not vulnerable to malicious 3<sup>rd</sup> party activity or virus;

3.1.3 Ensure comprehensive coverage of customer journeys, routes and points, including but not limited to, such perimeters, parking lots, and storage spaces, walkways, hallways, Internal and external building spaces and other relevant zones, through the use of CCTV surveillance. These surveillance systems should ensure the capture of clear and identifiable images whenever needed. Recordings, footages, or clips should be retained for a period ranging between 60 to 90 days;

3.2 Venue Owner shall, where applicable:

3.2.1 take all reasonable steps to protect the confidentiality, integrity and availability of the Personal Data and other information processed on behalf of the British Council in connection with this Agreement, including the use of “multi factor authentication” for (super)users who log in over the internet (the “Information”);

3.2.2 take all reasonable steps to protect the integrity and availability of any system it uses to process the Information and deliver the end-to-end service within its sphere of influence (including any third parties contracted as part of the process);

3.2.3 solicit and share with the British Council an annual independent information security assessment to provide assurance against paragraphs 3.1.3 and 3.1.4 above (This should be undertaken against a recognised framework/methodology such as SOC2, ISO27001 or COBIT. Material risks or gaps must be mitigated and confirmation of this communicated to the British Council. Where appropriate, ISO27001 or other recognised certifications (such as the Cyber Essentials Scheme) can be used as part of the evidence for paragraphs 3.1.3 and 3.1.4 above);

3.2.4 solicit an independent annual "Penetration Test" on all internet facing information systems from a CHECK or CREST approved organisation (The Penetration Test must follow CREST or CHECK methodologies and be categorised using the CVSS method. All High and Critical vulnerabilities must be mitigated within seven working days with all Medium vulnerabilities mitigated within 21 working days. A retest must be undertaken and results communicated to the British Council);

3.2.5 ensure that all personnel involved in the end-to-end process are vetted to a level of at least Baseline Personnel Security Standard (BPSS); and

3.2.6 also ensure its employees undertake annual information security training.

### 4 **Other Requirements**

4.1 Venue Owner shall ensure that:

- 4.1.1 the Venues are and will remain available for each Exam Sitting during the Session(s) with particular attention to ensuring that:
  - (i) there are no planned Fire Drills timetabled during an Exam Sitting;
  - (ii) there will be no noise disturbance:
    - (A) no events making extensive use of audio equipment to take place at the Venue during an Exam Sitting; and
    - (B) no construction or renovation work to take place at the Venue during an Exam Sitting;
  - (iii) there is no existing and/or any new cause or action being instigated against the Venue which may prevent or impede access to the Venue; and
  - (iv) any potential change, or change, of Control taking place ahead of the relevant Exam Sitting is notified to the British Council immediately on Venue Owner becoming aware of such change;
- 4.1.2 all national and local requirements applicable to the Venue are met including those regarding insurance, fire and safety; and
- 4.1.3 no Venue will fall into insolvency, receivership or be at risk of any financial failure during the Term.
- 4.1.4 Provide sufficient parking for candidate and staff cars.
- 4.2 Venue Owner shall ensure that it provides the British Council with details of which Venues meet which of the following ISOs and/or any local equivalents (as updated from time to time):
  - 4.2.1 **ISO 9001** Quality Management (2003)
  - 4.2.2 **ISO 10002** Customer Satisfaction and Complaints Handling (2006)
  - 4.2.3 **ISO 14001** Environmental Management (2006)
  - 4.2.4 **ISO 27001** Information & Data Security (2008)
  - 4.2.5 **ISO 23988** Use of IT in the delivery of assessments (2013)
  - 4.2.6 **ISO 22301** Business Continuity (2015)

## 5 Technical and Technical Support Requirements

Following is the Minimum the Minimum Specification in relation to certain IT and network components used in the receipt by the British Council of services provided by the Application Provider to deliver CBT. In addition, paragraph 4 below sets out the related Minimum Specification for Candidate workstation equipment that the British Council requires for the purposes of its CBTs.

**Venue Owner must comply with the Minimum Specification.**

### Hardware configuration

All-in-one PC's are permitted as long as they meet the minimum Technical Specification and do not have a Touch screen. The Application Provider highly recommends that All-in-one PC's meet the Recommended Technical Specifications.



## **Software licenses**

All Venues are required to have Windows operating systems that have completed online activation. Application software installed on all exam delivery workstations must also have current licensing. Windows Operating Systems must pass Genuine Windows Validation.

## **Network configuration**

It is strongly recommended that all machines with VTS Software installed remain in the same domain or workgroup, VLAN, and subnet. Network configurations that do not follow this guideline may experience decreased exam delivery performance. You may be asked to make changes to your network configuration to comply with this guideline as part of problem resolution.

## **Monitors**

Monitors for exam delivery workstations must be 17" or larger

- Must allow for the following display resolution settings:

- 1280 x 1024

- 1024 x 768

Monitor must be connected to the computer using DVI, DisplayPort, or HDMI

## **Exam Delivery**

In connection with the provision of the Services by the British Council (in conjunction with the Application Provider), the Minimum and Recommended Specifications applicable for administration workstations, servers and exam delivery workstations are:

**Administration Workstation (Venue administrator):**

Operating System	<b>Windows 10</b> Professional or Enterprise ( <b>64-bit</b> ) . To have option of upgrading to windows 11.
Processor	<i>Intel:</i> i5 or higher <i>AMD:</i> Phenom II series, FX-4000 series or newer <b>Note:</b> CPU must have a minimum of two cores (dual-core)
RAM	16 GB of RAM or more
Hard Drive	100 GB free disk space in NTFS format
BIOS Setting	BIOS settings of all test delivery machine to be password protected with following rules:  The password character length should contain minimum of 8 characters with uppercase and lowercase alphabetic characters, special and numeric characters.
US Booting	Booting from USB devices are to be disabled after all installations have been completed if carried out via USB.
Graphics Adapter	Video Adapter support for DirectX 10 or newer.  512MB dedicated Video RAM or more.  All newer computers and monitors should be connected via DVI, DisplayPort, or HDMI.  OpenGL 2.0 graphics driver
Display	Monitors for exam delivery workstations must be 17" or larger • Must allow for the following display resolution settings: • 1280 x 1024 • 1024 x 768 Monitor must be connected to the computer using DVI, DisplayPort, or HDMI
Mouse	2 Button Wheel Mouse  External Wheel Mouse with wired connection for reliability avoiding need to check and replace battery.  The mouse should be adjustable to ensure both left- and right-handed use.
Keyboard	English QWERTY Keyboard  External standard full keyboard, other types of keyboards need to be approved for use. Silent keyboard is preferred.
Network Connection	Minimum -100-Mbps Full Duplex WIRED connection to the network switch.  Recommended 1-Gbps Full Duplex WIRED connection to the network switch.  Strongly Recommended: All machines with VTS Software installed should be in the same domain or workgroup, VLAN, and subnet.

	Recommended: Domain network configuration preferable to workgroup network configuration for all test delivery machines
Internet Connection (where available)	Reliable Broadband (DSL, Cable or LAN/WAN). 15-Mbps minimum download speed and 5Mbps minimum upload speed.
Internet Browser	Internet Explorer 11, Microsoft Edge and Google Chrome.
Additional Software	Windows 10 requires, <b>.NET 3.5, 4.0 4.5.2, and 4.6.2</b> to be enabled on the Administration/Proctor workstation to complete the installation.  All workstations must have <b>Enterprise Grade Anti-Virus software</b> installed with a current update.
Security Measures	Up-to-date antimalware
	Activated local firewall
	Local device encryption
	Updated and patched Operating Systems and Applications
	Safely kept user account and password
	Trusted and secure internet connection
Additional Notes	<p>The Windows account used to install the Application Provider's Exam Delivery Software must have administrative rights in order to install properly.</p> <p>The Windows account profile logged into the exam delivery workstation must have Administrative rights in order to launch the 'Delivery Manager' software.</p> <p>The centre admin has to make sure that the number of devices linked to a network require additional speed for e.g if the centre has 20 candidate system &amp; 2 admin systems for a session and no other device is connected to a network then a total of 22 MBPs would be required</p> <p>If there are additional devices connected tablets, backoffice systems mobile phones then extra bandwidth will be required.</p>

#### Exam Delivery Workstation (Candidate):

Operating System	<b>Windows 10 Professional (64-bit)</b> and above  <b>VCS:</b> Windows 10 professional with Build 1909 64-bit
Processor	Intel: i5 minimum or equivalent. Intel i7 or equivalent recommended. or higher AMD: Phenom II series, FX-4000 series or newer <b>Note:</b> CPU must have a minimum of two cores (dual-core)

	<p>TPM Chip for encryption required</p> <p><b>VCS:</b> recommended <i>Intel i7</i> or equivalent higher than 2 GHz. Minimum Specification Intel i5 or equivalent higher than 2 GHz</p>
RAM	<p>8GB of RAM</p> <p><b>VCS:</b> Recommended 16.0 GB 64bit. Minimum Specification 8 GB 64 bit</p>
Hard Drive	<p>100 GB free disk space in NTFS format</p> <p>Enable BitLocker to encrypt local hard drive via TPM 2.0. BitLocker is built in the windows 10 professional or above version.</p> <p><b>VCS:</b> Recommended 80 GB Available Space. Minimum Specification 30 GB available space</p>
Graphics Adapter	<p>Video Adapter must support <b>DirectX 10</b> or higher. Latest drivers installed.</p> <p><b>128MB</b> of dedicated Video RAM.</p> <p>All exam delivery workstations must have a Graphics Adapter that supports GPU Scaling (sometimes called Maintaining Aspect Ratio). All exam delivery workstations <b>must have the GPU Scaling feature enabled.</b></p> <p>All computers and monitors should be connected via DVI, DisplayPort, or HDMI. OpenGL 2.0 graphics driver</p>
Display	<p>Monitors for exam delivery workstations must be 17" or larger</p> <ul style="list-style-type: none"> <li>• Must allow for the following display resolution settings: <ul style="list-style-type: none"> <li>• 1280 x 1024</li> <li>• 1024 x 768</li> </ul> </li> </ul> <p>Monitor must be connected to the computer using DVI, DisplayPort, or HDMI</p> <p><b>VCS:</b> Recommended resolution for 17" screen is 1680x 1050. For any devices higher than 17", always use the highest resolution</p> <p>Screen should be on 100% scale layout (option under screen settings for text and size)</p> <p>Display orientation should be on landscape</p> <p>Screen Size VCS: 17" inch Monitor is minimum for VCS, higher is recommended.</p> <p>If laptop is used, it is strongly recommended to connect laptop to an external monitor for a better view</p>
Mouse	<p>2 Button Wheel Mouse</p> <p>External Wheel Mouse with wired connection for reliability avoiding need to check and replace battery.</p>

	The mouse should be adjustable to ensure both left- and right-handed use.
Keyboard	English QWERTY Keyboard  External standard full keyboard, other types of keyboards need to be approved for use. Silent keyboard is preferred.
Network Connection	Minimum -100-Mbps Full Duplex WIRED connection to the network switch.  Recommended 1-Gbps Full Duplex WIRED connection to the network switch.  Only WIRED networks to be used. Not accessible with wifi networks. Wired internet connection to machine must be maintained throughout duration of test for regular heartbeat check.  <b>Strongly Recommended:</b> All machines with VTS Software installed should be in the same domain or workgroup, VLAN, and subnet.  Recommended: Domain network configuration preferable to workgroup network configuration for all test delivery machines.  <b>VCS:</b> Required and specified bandwidth speed per connection (Standard and basic performance): 2 Mbps Buffering speed per connection (HD quality and performance): 5Mbps buffer LAN Cable connection is recommended but Wi-Fi is can be used for establishing an internet connection.
Internet Connection (where available)	Reliable Broadband (DSL, Cable or LAN/WAN). 15-Mbps minimum download speed and 5Mbps minimum upload speed
Internet Browser	<b>Internet Explorer 11 required</b> <b>Microsoft Edge and Google Chrome 79 or later</b>  Firefox 72 or later  <b>VCS:</b> Google chrome & Microsoft Edge. The VCS web-version will only run on these two recommended browsers
Additional Software	<b>Windows 10 requires, .NET 3.5, 4.0, 4.5.2, 4.6,.2 to be enabled on exam delivery workstation to complete the installation.</b> All workstations must have <b>Enterprise Grade Anti-Virus software</b> installed with a current update.  <b>VCS:</b> .NET Framework 4.7.1 or higher
System Language	English language

Firewall	<p>Access over ports 80 and 443 to domains:  - https://integration.connectplus.rm.com/  - https://rmcpluslivetests.blob.core.windows.net/  CW: Access to TSAs IP over ports 8080 to 8090  Connect Plus must be provided access to ports 80, 443, 8080-8090</p> <p><b>VCS:</b> Traffics from ports 80,443,8080-8090 is allowed</p>				
Headset	<p>External and must use wired connection for security reasons (no wi-fi / blu-tooth connections during test). The connection point can be USB or audio jack.  Noise cancellation ('denoise') headphones are strongly recommended.</p> <p>VCS: External headphones,  Noise-cancelling headphones with an audio bandwidth rate of 160 Kbps; including microphone; includes disposable headset cover  Recommended model: Jabra Evolve 40 or equivalent (Logitech)  VCS: Traffics from ports 80,443,8080-8090 is allowed</p>				
Licences	<p>All the networked computer equipment's Microsoft operating licences must be original and valid for the duration of any of the Sessions contracted with the venue</p>				
Window System privilege	<p>Connect Plus is installed with Windows Administrator level permissions.</p> <p>Installation is to be done by right-clicking and selecting "Run As Administrator" irrespective of the user account having windows admin permissions or not</p> <p>The Windows account used to install the Application Provider's Testing System Platform must have Administrative rights to install properly.  The Windows account profile logged into the exam delivery workstation must have Administrative rights to launch the Delivery Manager software.</p>				
Connect Plus Instance on Computer	<p>There should be no existing instance of ConnectPlus software on the computers prior to installation and set up for a computer-delivered IELTS test. All such existing ConnectPlus software linked to a different centre number should be uninstalled as two different centre numbers cannot use the same instance of ConnectPlus software</p>				
Timezone	<p>All machines need to be in local time zone and same time sync</p>				
Security Measures	<table border="1"> <tr> <td>Up-to-date antimalware</td> </tr> <tr> <td>Activated local firewall</td> </tr> <tr> <td>Local device encryption</td> </tr> <tr> <td>Updated and patched Operating Systems and Applications</td> </tr> </table>	Up-to-date antimalware	Activated local firewall	Local device encryption	Updated and patched Operating Systems and Applications
Up-to-date antimalware					
Activated local firewall					
Local device encryption					
Updated and patched Operating Systems and Applications					

	Safely kept user account and password
	Trusted and secure internet connection
Additional Notes	<p>The Windows account used to <b>install</b> the Application Provider's Testing System Platform must have <b>Administrative rights</b> to install properly.</p> <p>The Windows account profile logged into the <b>exam delivery workstation</b> must have <b>Administrative rights</b> to launch the Delivery Manager software.</p> <p>The centre admin has to make sure that the number of devices linked to a network require additional speed for e.g. if the centre has 20 candidate system &amp; 2 admin systems for a session and no other device is connected to a network then a total of 22 MBPs would be required</p> <p>If there are additional devices connected tablets, back office systems mobile phones then extra bandwidth will be required.</p>

**VCS Additional (Candidate):**

Camera	<p>External or integrated camera, USB HD Webcam is recommended.</p> <p>Minimum framerate of H.264 for video encoding</p> <p>Minimum resolution of 720p with the ability to capture a high-quality source</p>
Help Button & Signal Receiver	Candidates can press help button to call Venue Staff for help during VCS test.

**Additional CBT minimum specification – Candidate workstation**

Consistency of Equipment at a Venue. Venue Owner shall ensure that each Venue provides a consistent set of workstation hardware (computer, monitor, mouse, and keyboard) so that all Candidates sitting a CBT in a Venue use the same type of equipment. The makes and models may be different so long as they meet the minimum specification and other requirements set out in this Annex.

Non-desktop PC Devices. Where laptops without numeric keypads are used Candidates must be provided with a separate English QWERTY Keyboard with numeric keypad as well as a 2-Button Wheel Mouse.

The British Council wishes to avoid, or mitigate, the risk of a networked delivery solution by ensuring that all network connections between Venue servers, administration workstations and exam delivery workstations are wired. Therefore, when sourcing Venues and/or additional capacity, Venue Owner must not use a wireless network solution between the Venue server, the administration workstation and the exam delivery workstation, unless there is no other alternative. If any such Venues are required to meet the British Council's needs, Venue Owner must seek confirmation in writing from the British Council before engaging such a Venue.

Contingency Planning: One back up device for up to 5 or less active workstations. Subsequently increasing back up devices for every up to 5 active workstations.

It is strongly recommended that UPS is available ensure buffer to save the test or you can successfully complete a test in case there is a power outage suddenly.

### **Browsers, operating systems and screen resolutions**

The British Council's Application Provider will support all browsers within the scope of the Minimum Specification.

### **Technical Support**

Experienced technician(s) is/are available at each Venue for each Exam Sitting, which in addition to their technical knowledge and competence of networks and computers must be able to converse in English with the Application Provider's help desk.