

**The Judiciary's video conferencing facilities
for remote hearings for civil business**

Parties who wish to participate in remote hearings have to be equipped with the following items:

- (a) video conferencing ("VC") unit;
- (b) laptop computer;
- (c) display unit;
- (d) camera;
- (e) speaker system; and
- (f) microphone.

(I) Availability of Hardware and Software Options

2. To provide more user-friendly and facilitating means of connecting to the court's video-conferencing facilities ("VCF"), the Judiciary will from 15 June 2020 onward support the use of two alternatives in terms of VC units required of court users for such connection :

- (a) hardware option; and
- (b) software option.

(a) Hardware Option

3. For the hardware option, court users will continue to be connecting to the Judiciary's VCF using some hardware VC units. Please refer to paragraph 6(a)(i) below for more information.

(b) Software Option

4. For the software option, court users will be able to use normal desktop computer devices, with installation of appropriate software, to connect to the Judiciary's VCF. Please refer to paragraph 6(a)(ii) below for more information.

5. With this more facilitating VCF solution, participant(s) will be informed of unique meeting ID and passcode for identity authentication. Only those connection requests associated with a valid meeting ID and passcode pair will be accepted by the Judiciary for the conduct of remote hearings.

(II) Technical Requirements of Court Users

6. Connection to the Judiciary's VCF can be done using both the hardware and software options by using different VC units. Technical requirements of these two categories of VC units are as follows:

(a) VC Unit

(i) Hardware VC Unit [i.e. for hardware option]

Protocol	ITU H.323, SIP and H.320 compliant
Connection	Internet; or Integrated Services Digital Network ("ISDN")
Speed	Up to 6 Mbps for Internet connection; or Up to 512 kbps for ISDN connection
Video resolution	from 352x240 up to 1920x1080
Security	embedded encryption to support ➤ direct end-to-end encryption with the Judiciary's VCF ^[1] ➤ encryption strength of at least 128-bit AES ➤ encryption protocol: - H.235 for H.323 connections or - TLS/SRTP for SIP connections

(ii) Software VC Unit [i.e. for software option]

Protocol	SIP compliant
Connection	Internet
Speed	at least 2 Mbps
Video resolution	from 352x240 up to 1920x1080
Security	embedded encryption to support ➤ direct end-to-end encryption with the Judiciary's VCF ^[1]

	➤ encryption strength of at least 128-bit AES ➤ encryption protocols of SSL/TLS
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[1] end-to-end encryption is a mandatory requirement unless directed otherwise by the presiding JJO

7. Functional requirements of the other common items to be used in the conduct of remote hearings for both hardware and software options are as follows:

(b) Laptop Computer

As a secondary channel transmission, receipt and display of document view, to be set up side-by-side the camera view as an additional function of the VC unit.

(c) Display Unit

Appropriately sized display unit supporting high definition screen display to facilitate the conduct of remote hearings.

(d) Camera

For capturing the participant's facial and other views to facilitate the conduct of remote hearings. The camera shall be compatible with the VC unit of the participant, both in terms of connectivity and video resolution, and supports at least panning and zoom views.

(e) Speaker System

The speaker shall be connected to the VC unit of the participant for the participant to hear the voices of the other participants audibly to facilitate the conduct of remote hearings. The system shall be equipped with feedback control feature.

(f) Microphone

The microphone shall be connected to the VC unit of the participant for capturing his/her voice to facilitate the conduct of remote hearings.

(III) Technical Specifications of the Court's VCF

8. The technical specifications of the VCF of the Judiciary are given below for reference.

(a) Video Conferencing Server System

Protocol ^[2]	ITU H.323, SIP and H.320 compliant
Connection	Internet; or Integrated Services Digital Network ("ISDN")
Speed	Up to 6 Mbps for Internet connection; or Up to 512 kbps for ISDN connection
MCU compatibility	H.241 and H.231
Video resolution	from 352x240 up to 1920x1080
Security	embedded encryption ^[3]
Multi-site conference	up to nine (9) remote sites

^[2] the Judiciary is actively considering to enable the support of WebRTC so that participants may connect to the Judiciary's VCF using a simple web browser in the near future. More information will be provided in due course.

^[3] VC connection may not be encrypted, depending on the compatibility with the remote VC unit(s)

(b) Camera, Speakers and Microphone