



European Hybrid World Cup Qualification 2021

Technical preparation of the venues

- Metal detector and electronic devices deposit
- Zoom conference system requirements
- Tornelo playing zone requirements
- Venue and players' cameras
- Redundant internet connections and backup of electric power

Deposit for electronic devices and metal detector for checking

- Before the entrance to the playing zone the fair play control should be organised by arbiters using metal detector and all electronic devices should remain in deposit



Zoom conference system requirements

- Processor - Dual-core 2Ghz or higher (Intel i3/i5/i7, AMD equivalent)
- Memory - RAM 4GB
- Operating system - Windows 7 or higher, MacOS 10.9 (see Tornelo)*
- Browsers - Explorer 11+, Edge 12+, Firefox 27+, Chrome 30+ (see Tornelo)**
- Internet bandwidth per player for 1080p HD video 3.0/3.8Mbps (down/up)***



* Zoom supports other OS - not allowed for ECU Hybrid

** Zoom supports also Safari7+ - not recommended for ECU Hybrid

*** for 720p HD video 1.8/2.6Mbps (down/up)

Tornelo playing zone system requirements

- Processor - Dual-core 2Ghz or higher (Intel i3/i5/i7 or AMD equivalent)
- Memory - RAM 4GB
- Operating system - Windows 7 or higher, MacOS 10.13 or higher*
- Browsers - Edge 84+, Firefox 78.1+, Chrome 87+**
- Internet bandwidth per player 600Kbps (up/down)

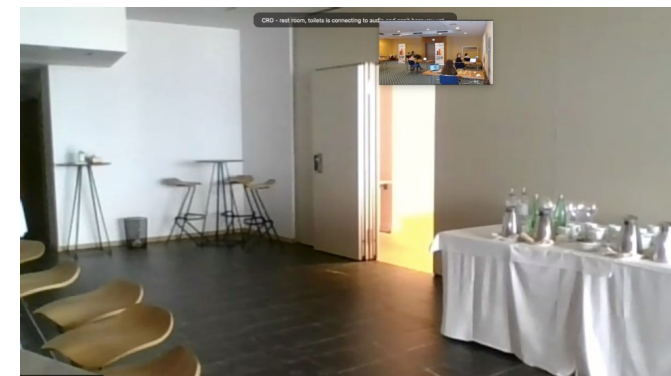


* Tornelo supports also Linux, iOS, Android and Blackberry - not allowed for ECU Hybrid.

** Tornelo supports also Safari 12+ - not recommended for ECU Hybrid

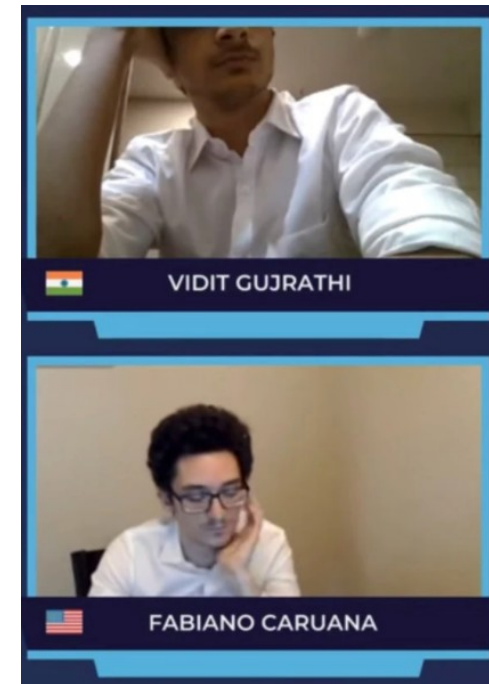
Venue Cameras – FHD, aperture of the lens 1.0-2.0

- Venue cameras (overall view of the playing venues and refreshment area)



Players Cameras – HD, good light is essential (400 lumens)

- Players camera (recommended external side view, acceptable notebook built-in)



Redundant internet and electric power backup

UPS (power backup for PC) and dual WAN internet router with automatic switching



Summary for the technical preparation

- Fair play control of the players with metal detectors + deposit
- PC/notebook i3 or better/4GB RAM or more/Windows7,8,10 (recommended) or MacOS 10.13 or higher with Edge 84+, Firefox 78.1+, Chrome 87+ (recommended)
- Charged battery in the notebooks, fully loaded UPS for PC
- Internet connection 5Mbps (down/up) per one player with power backup
- Backup internet connection with automatic switching
- Good light at the playing venue (400 lumens)
- Venue cameras FHD with aperture between 1.0-2.0
- Players cameras HD, external side view camera recommended, build in acceptable