

H.3xx videoconferencing standards

H.323

This is the umbrella standard for IP conferencing. It includes several sub-standards: H.261 defines the mandatory video Coder/Decoder (CODEC)* standard, whereas H.263 and H.264 define optional video CODECs. Similarly G.711 is the mandatory audio CODEC and G.729 one of several audio CODEC options. The complex operation of managing the data streams from the CODEC including calling, establishing a call, and controlling the various component parts i.e. video, audio and data is defined by two standards, H.225 and H.245.

The capacity available to an application on a basic IP network varies with the amount of data traffic carried, so with the basic standard there is no Guaranteed Quality of Service (GQOS) i.e. the received quality can vary a great deal, from acceptable to very poor. Within the H.323 standard there are however suggested methods for maintaining quality, to overcome this limitation.

* A CODEC provides the compression and signal processing to enable high bandwidth sound & low bandwidth transmission paths.

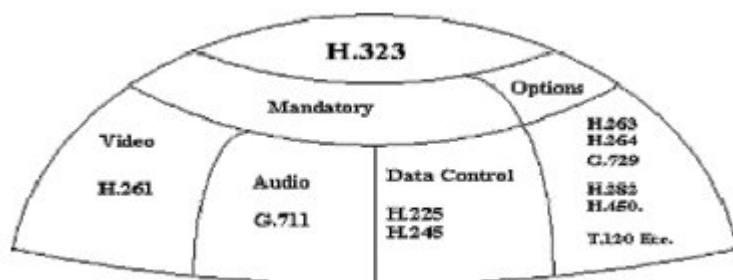


Figure 1: H.323 Conferencing Standard

H.322

H.322 is the umbrella standard for IP conferencing that provides a guaranteed quality of service within LANs. Other methods are now in use to provide GQoS beyond local networks and these are covered in Guaranteed Quality of Service [1].

H.310

This is the umbrella standard for broadband conferencing over ATM networks.

H.324

This is the umbrella standard for very low bandwidth conferencing, e.g. over GSTN (i.e. telephone networks).

H.324/M

This is the standard for visual telephone terminals over mobile radio. It is not really applicable to videoconferencing but included for completeness.

H.320

The umbrella standard for NISDN (usually abbreviated to ISDN) videoconferencing includes separate sub-standards for video coding, audio coding and data format. Options include improved video CODECs, still image transfer, far end camera control, multipoint control, data

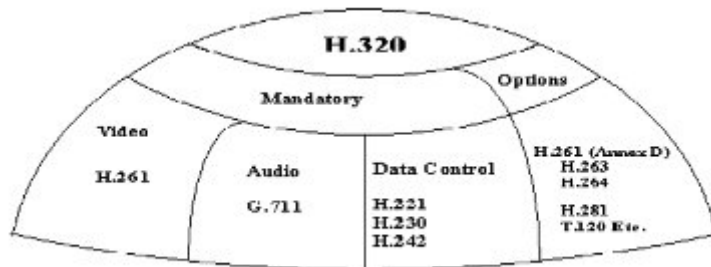


Figure 2: H.320 Conferencing Standards

[2]

Figure 2: H.320 Conferencing Standards

H.321 The umbrella standard for BISDN; this adapts H.320 (NISDN) narrowband ISDN to work within ATM environments.

Source URL: <https://community-stg.jisc.ac.uk/library/janet-services-documentation/h3xx-videoconferencing-standards>

Links

[1] <http://community.ja.net/library/janet-services-documentation/guaranteed-quality-service-gqos>

[2] <https://community-stg.jisc.ac.uk/system/files/vcstandards02.jpg>