What is claimed is:

1. An apparatus, comprising:

one or more radio-frequency (RF) transceivers arranged to receive multimedia content during a session over a first link from a wireless wide-area network (WWAN), and forward information over a second link to a display device having device capabilities to enhance presentation of the multimedia content received over the first link, the first and second links comprising heterogeneous links; and

a video adaptation module operative on a processor circuit to gather device capability information from the display device, and modify device capability exchange signaling to the WWAN based upon the gathered device capability information from the display device, the device capability exchange signaling to define exchange of multimedia content over the first link.

2. The apparatus of claim 1, the video adaptation module operative on the processor circuit to negotiate session parameters with the WWAN based upon the gathered device capability information from the display device.

3. The apparatus of claim 1, the device capability exchange signaling including one or more of a pre-decoder buffer size, initial buffering period, decoder capability, display properties, streaming method, adaptation support information, quality of experience (QoE) support information, extended real time transport control protocol (RTCP) reporting support, fast content switching support, supported real-time transport protocol (RTP) profile information, or session description protocol (SDP) attributes.

4. The apparatus of claim 2, the session parameters including one or more of codec information, container format, decoder capabilities, video quality requirements, quality of service (QoS) parameters, transport protocols that account for characteristics of the second link, or capabilities of the display device.

5. The apparatus of claim 1, the video adaptation module operative on the processor circuit to manage communication with the display device over the second link based upon information gathered from session level signaling with the WWAN using SDP or media presentation description (MPD).

6. The apparatus of claim 5, the video adaptation module operative on the processor circuit to perform over the second link one or more of modify session parameters, adapt video parameters, prioritize traffic over the second link, allocate resources, and optimize bandwidth allocation.

7. The apparatus of claim 1, the video adaptation module operative on the processor circuit to perform media adaptation functions based upon one or more of characteristics of the second link or device capabilities of the display device.

8. The apparatus of claim 7, the media adaptation functions comprising bit rate, packet rate, or error resilience.

9. The apparatus of claim 8, the video adaptation module operative on the processor circuit to derive, based upon characteristics of the second link and display device

capability information, one or more of RTCP receiver reports, real-time streaming protocol (RTSP) messages, temporary maximum media stream bit rate request (TMMBR) messages, or hypertext transfer protocol (HTTP) GET requests for dynamic adaptive streaming over HTTP (DASH) representations.

10. The apparatus of claim 1, the video adaptation module operative on the processor circuit to generate a QoE report based on reliability of transmission over the second link and/or characteristics of media processing performed by the display device.

11. The apparatus of claim 10, the media processing including media buffering or media decoding.

12. The apparatus of claim 1, the video adaptation module operative on the processor circuit to perform using a (RTSP)/SDP protocol stack over the second link session management or device capability exchange signaling.

13. The apparatus of claim 1, the video adaptation module operative on the processor circuit to perform using an SIP/SDP protocol stack over the first link one or more of device capability exchange signaling, negotiation of session parameters, or multimedia-related information exchange signaling.

14. The apparatus of claim 1, the video adaptation module operative on the processor circuit to perform using an RTSP/SDP protocol stack over the first link one or more of

device capability exchange signaling, negotiation of session parameters, or multimedia-related information exchange signaling.

15. The apparatus of claim 1, the video adaptation module operative on the processor circuit to perform multimedia-related information exchange signaling over the first link using HTTP protocol stack and MPD metadata.

16. The apparatus of claim 1, the video adaptation module operative on the processor circuit to gather second device capability information from an additional display device coupled to the apparatus over a third link, modify device capability exchange signaling to the WWAN based upon the gathered second device capability information, the device capability exchange signaling to define exchange of multimedia content between the apparatus and the WWAN, and negotiate session parameters with the WWAN based upon the gathered second device capability information from the additional display device.

17. The apparatus of claim 1, the video adaptation module operative on the processor circuit to host a packet switched streaming (PSS) application, and temporarily adjust device capability attributes that signal attributes that describe capabilities of the display device.

18. At least one computer-readable storage medium comprising instructions that, when executed, cause a system to:

store device capability information for a display device that was received over a local link;

modify, based upon the gathered device capability information, device capability exchange signaling to be sent over a non-local link to a wireless wide area network (WWAN), the non-local link to communicate multimedia content with the WWAN; and

negotiate session parameters for exchange of multimedia content with the WWAN based upon the gathered second device capability information from the display device.

19. The computer-readable storage medium of claim 18, comprising instructions that when executed cause the system to manage communication with the display device over the local link based upon information gathered from session level signaling with the WWAN using session description protocol (SDP) or media presentation description (MPD).

20. The computer-readable storage medium of claim 18, comprising instructions that when executed cause the system to perform media adaptation functions based upon one or more of characteristics of the local link or device capabilities of the display device.

21. The computer-readable storage medium of claim 20, the media adaptation functions comprising bit rate, packet rate, or error resilience.

22. The computer-readable storage medium of claim 18, comprising instructions that when executed cause the system to generate a quality of experience (QoE) report based

on reliability of transmission over the local link or characteristics of media processing performed by the display device.

23. The computer-readable storage medium of claim 18, comprising instructions that when executed cause the system to perform over the local link session management or device capability exchange signaling using a real-time streaming protocol (RTSP)/SDP protocol stack.

24. The computer-readable storage medium of claim 18, comprising instructions that when executed cause the system to perform using an SIP/SDP protocol stack over the first link one or more of device capability exchange signaling, negotiation of session parameters, or multimedia-related information exchange signaling.

25. The computer-readable storage medium of claim 18, comprising instructions that when executed cause the system to perform using an RTSP/SDP protocol stack over the first link one or more of device capability exchange signaling, negotiation of session parameters, or multimedia-related information exchange signaling.

26. The computer-readable storage medium of claim 18, comprising instructions that when executed cause the system to perform over the first link multimedia-related information exchange signaling using HTTP protocol stack and media presentation description (MPD) metadata.

27. A method, comprising:

gathering device capability information from one or more display devices each linked to a user equipment (UE) over a respective local link;

modifying, based upon the gathered device capability information of the one or more display devices, device capability exchange signaling over a non-local link to a wireless wide area network (WWAN); and

negotiating session parameters with the WWAN based upon the gathered device capability information, the session parameters to define transmission of multimedia content between the UE and WWAN.

28. The method of claim 27, the device capability exchange signaling including one or more of a pre-decoder buffer size, initial buffering period, decoder capability, display properties, streaming method, adaptation support information, quality of experience (QoE) support information, extended real time transport control protocol (RTCP) reporting support, fast content switching support, supported real-time transport protocol (RTP) profile information, or session description protocol (SDP) attributes.

29. The method of claim 27, the session parameters including one or more of codec information, container format, decoder capabilities, video quality requirements, quality of service (QoS) parameters, transport protocols that account for characteristics of the second link, or capabilities of the one or more display devices.

30. The method of claim 27, comprising managing communication with the one or more display devices over respective one or more local links based upon information

gathered from session level signaling with the WWAN using session description protocol (SDP) or media presentation description (MPD) metadata.

What is claimed is:

1. User Equipment (UE), comprising:

a packet based network interface to receive one or more media streams over a first link of a third generation partnership project (3GPP) network; and

a packet-switched streaming service (PSS) client to send capability information over the first link, the capability information to specify device capability attributes that describe device capabilities used to receive the one or more media streams over the first link, the device capability attributes to describe capabilities of a display device accessible via a second link of a wireless local area network, the PSS client to manage communication with the display device over the second link based upon information gathered from session level signaling with a PSS server using a session description protocol (SDP) or media presentation description (MPD).

2. The UE of claim 1, the packet based network interface to receive a media stream via a real time streaming protocol (RTSP).

3. The UE of claim 1, the packet based network interface to receive a media stream via a hypertext transfer protocol (HTTP).

4. The UE of claim 1, the packet based network interface to receive a media stream via a dynamic adaptive streaming over hypertext transfer protocol (DASH).

5. The UE of claim 1, the PSS client to send capability information via a real time streaming protocol (RTSP) and a session description protocol (SDP).

6. The UE of claim 1, the capability information including one or more of a pre-decoder buffer size, initial buffering period, decoder capability, display properties, streaming method, adaptation support information, quality of experience (QoE) support information, extended real time transport control protocol (RTCP) reporting support, fast content switching support, supported real-time transport protocol (RTP) profile information, or session description protocol (SDP) attributes.

7. The UE of claim 1, the PSS client to send negotiate session parameters over the first link based upon the capabilities of the display device.

8. The UE of claim 7, the session parameters including one or more of codec information, container format, decoder capabilities, video quality requirements, quality of service (QoS) parameters, transport protocols that account for characteristics of the second link, or capabilities of the display device.

9. The UE of claim 1, comprising a radio-frequency (RF) transceiver to communicate information over the second link, the PSS client to receive attributes that describe the display device capabilities over the second link via the RF transceiver, and forward the one or more media streams over the second link via the RF transceiver.

10. The UE of claim 9, the PSS client to perform over the second link one or more of modify session parameters, adapt video parameters, prioritize traffic over the second link, allocate resources, and optimize bandwidth allocation.

11. The UE of claim 9, the PSS client to perform media adaptation operations based upon one or more of characteristics of the second link or capabilities of the display device.

12. The UE of claim 1, the device capability attributes each comprising an attribute name, a permissible value, and semantics of a defined vocabulary.

13. The UE of claim 1, comprising a touch screen display.

14. User Equipment (UE), comprising:

a processor circuit;

a packet-switched streaming service (PSS) client for execution by the processor circuit to receive capability information for a media stream over a link of a third generation partnership project (3GPP) long term evolution (LTE) or LTE advance (LTE-A) network, the capability information to specify device capability attributes used to receive the media stream over the link, and perform temporary adjustments to the device capability attributes to describe capabilities of a display device; and

a radio-frequency (RF) transceiver to forward the one or more media streams to the display device over a second link of a wireless local area network, the PSS client to derive, based upon characteristics of the second link and display device capability information, one or more of real-time transport control protocol (RTCP) receiver reports, real-time streaming protocol (RTSP) messages, temporary maximum media stream bit rate request (TMMBR) messages, or hypertext transfer protocol (HTTP) GET requests for dynamic adaptive streaming over HTTP (DASH) representations.

15. The UE of claim 14, the PSS client to receive the media stream via a real time streaming protocol (RTSP), a hypertext transfer protocol (HTTP), or a dynamic adaptive streaming over HTTP (DASH).

16. The UE of claim 14, the PSS client to generate a quality of quality of experience (QoE) report based on reliability of transmission over the second link or characteristics of media processing performed by the display device.

17. The UE of claim 16, the media processing to include media buffering operations or media decoding operations.

18. The UE of claim 14, the PSS client to perform using a real time streaming protocol (RTSP) and session description protocol (SDP) protocol stack over the second link session management or device capability signaling.

19. The UE of claim 14, comprising a touch screen display.

20. A wireless device, comprising:

a radio-frequency (RF) transceiver to receive one or more media streams from a PSS server over a first link of a third generation partnership project (3GPP) long term evolution (LTE) or LTE advance (LTE-A) network; and

a video adaptation module to cause capability information to be sent by the RF transceiver over the first link, the capability information to specify device capability attributes used to receive the one or more media streams over the first link, the video adaptation module to perform temporary adjustments to the device capability attributes to

describe capabilities of a display device accessible via a second link of a wireless local area network and use a hypertext transfer protocol (HTTP) protocol stack and media presentation description (MPD) metadata to cause multimedia-related information signaling.

21. The wireless device of claim 20, the RF transceiver to receive a media stream via a real time streaming protocol (RTSP), a hypertext transfer protocol (HTTP), or a dynamic adaptive streaming over HTTP (DASH).

22. The wireless device of claim 20, the video adaptation module to use a session initiation protocol (SIP) and session description protocol (SDP) protocol stack to cause device capability signaling, negotiation of session parameters, or multimedia-related information exchange signaling.

23. The wireless device of claim 20, the video adaptation module to use a real time streaming protocol (RTSP) and session description protocol (SDP) protocol stack to cause device capability signaling, negotiation of session parameters, or multimedia-related information signaling.

24. The wireless device of claim 20, comprising a touch screen display.

25. A method, comprising:

receiving one or more media streams over a first link of a third generation partnership project (3GPP) network;

sending capability information over the first link, the capability information to specify device capability attributes that describe device capabilities used to receive the one or more media streams over the first link, the device capability attributes to describe capabilities of a display device accessible via a second link of a wireless local area network; and

managing communication with the display device over the second link based upon information gathered from session level signaling with a PSS server using a session description protocol (SDP) or media presentation description (MPD).

26. The method of claim 25, comprising sending the capability information via a real time streaming protocol (RTSP) and a session description protocol (SDP).

27. The method of claim 25, comprising receiving the media stream via a real time streaming protocol (RTSP).

28. The method of claim 25, comprising receiving the media stream via a hypertext transfer protocol (HTTP).

29. The method of claim 25, comprising receiving the media stream via a dynamic adaptive streaming over hypertext transfer protocol (DASH).