

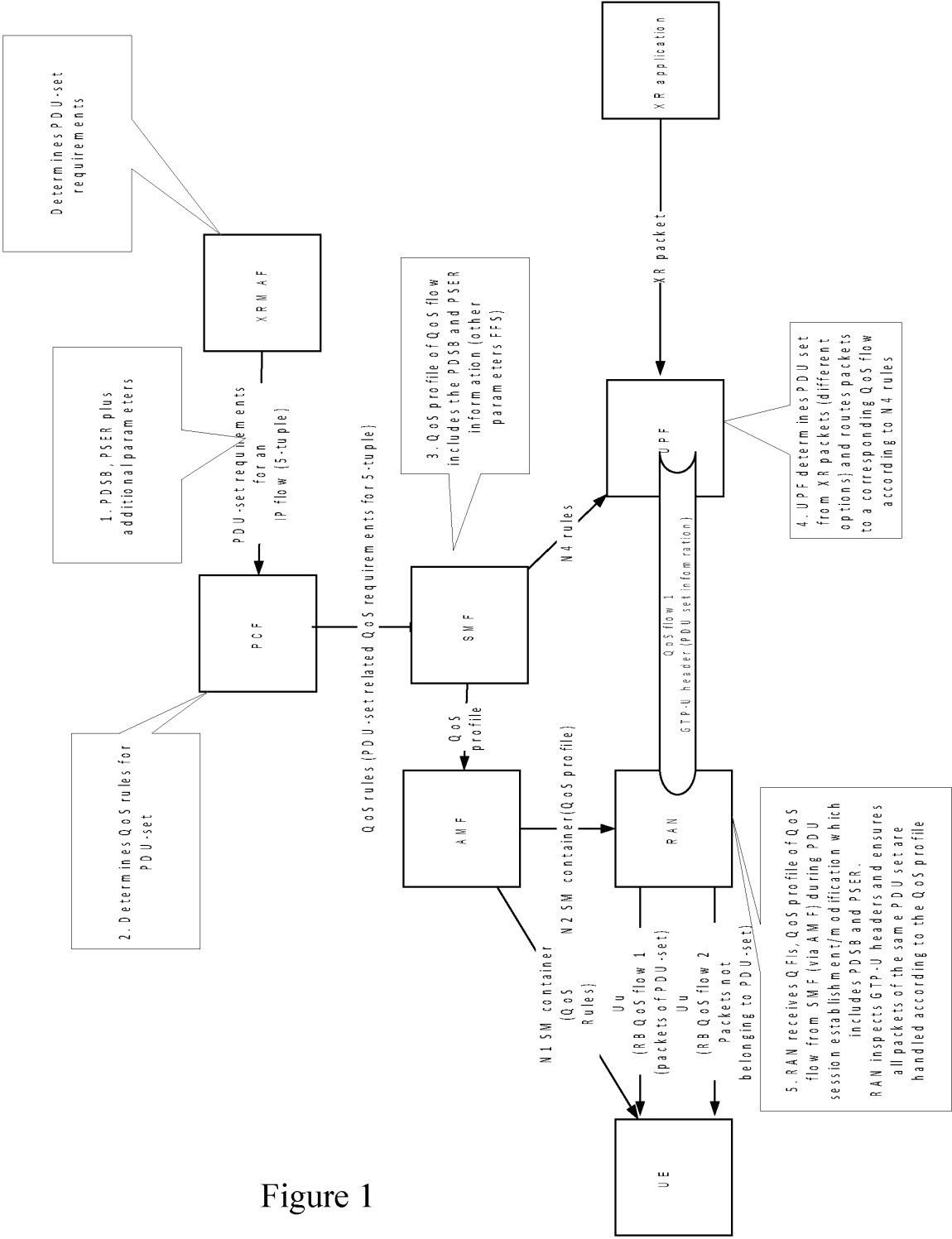


Figure 1

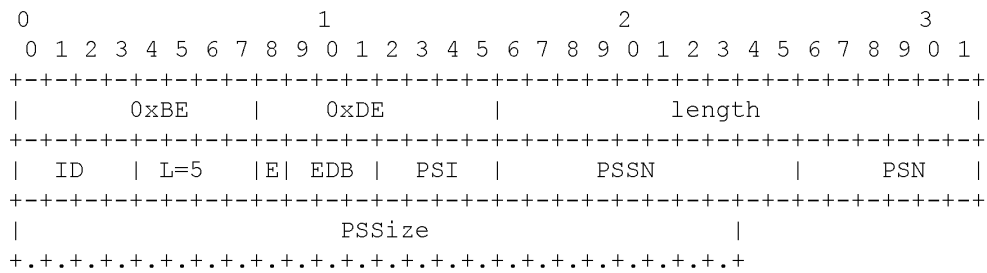


Figure 2A

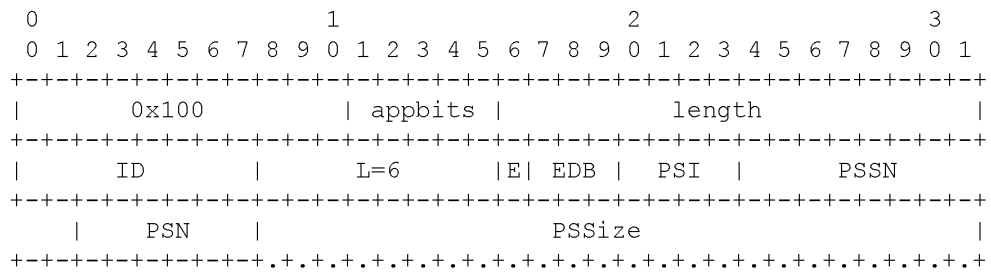


Figure 2B

3/20

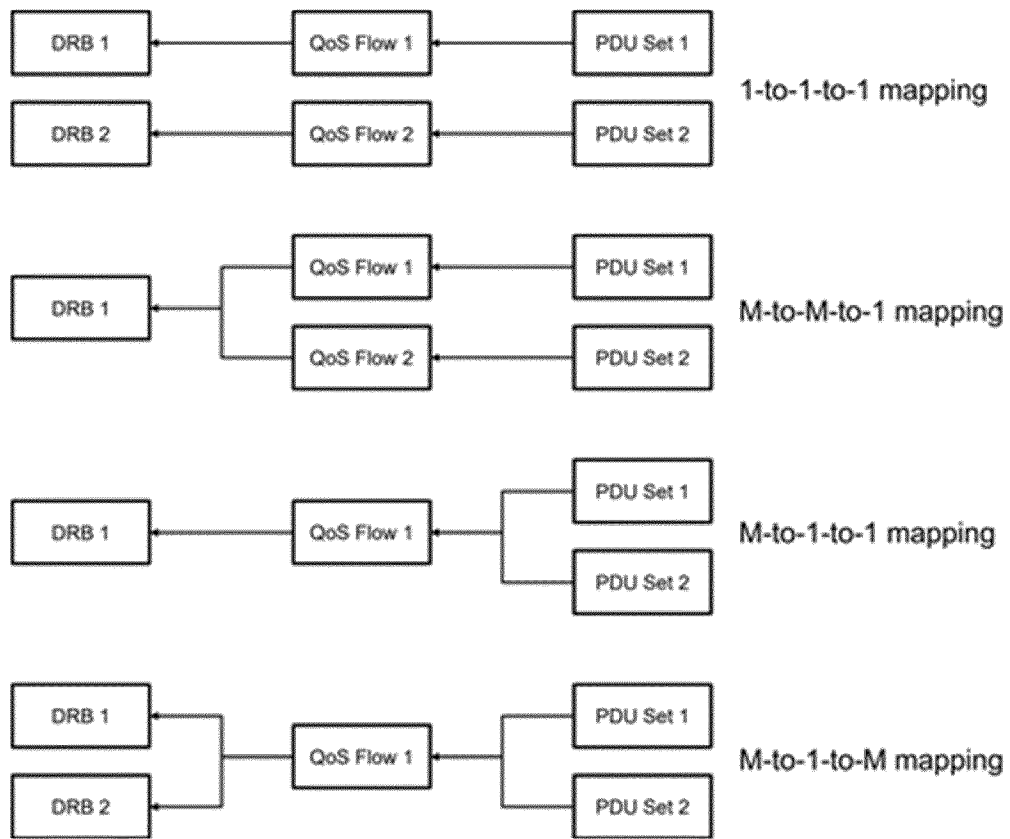


Figure 3

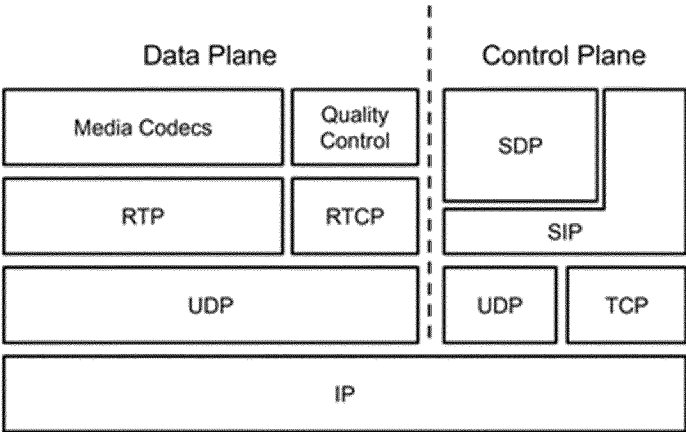


Figure 4

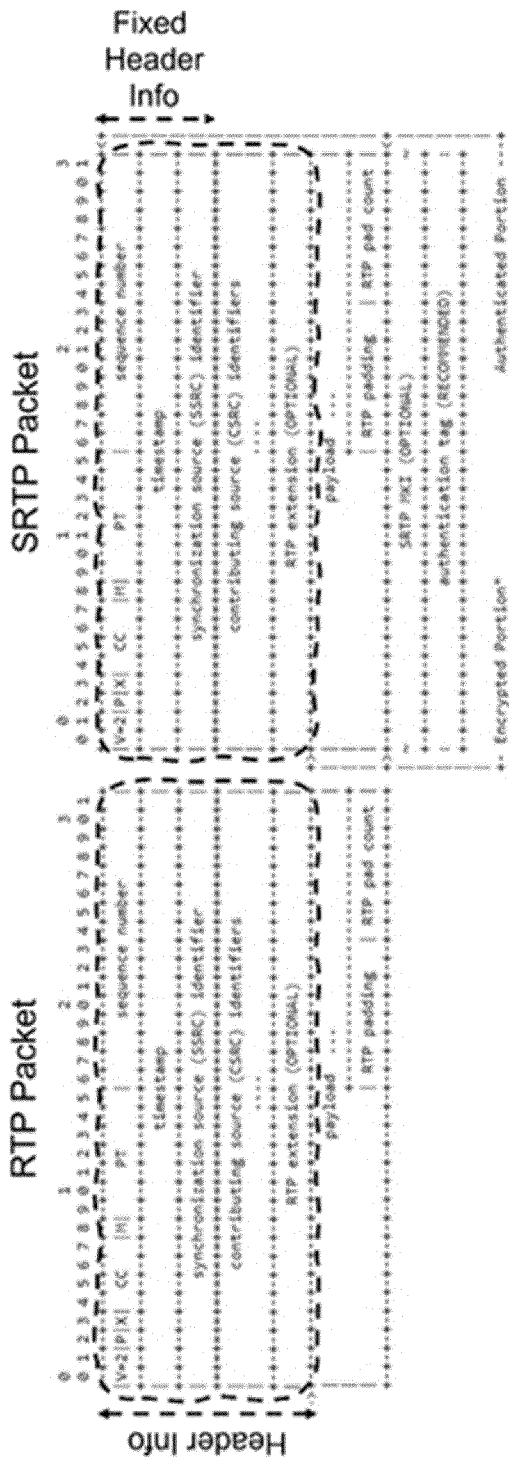


Figure 5

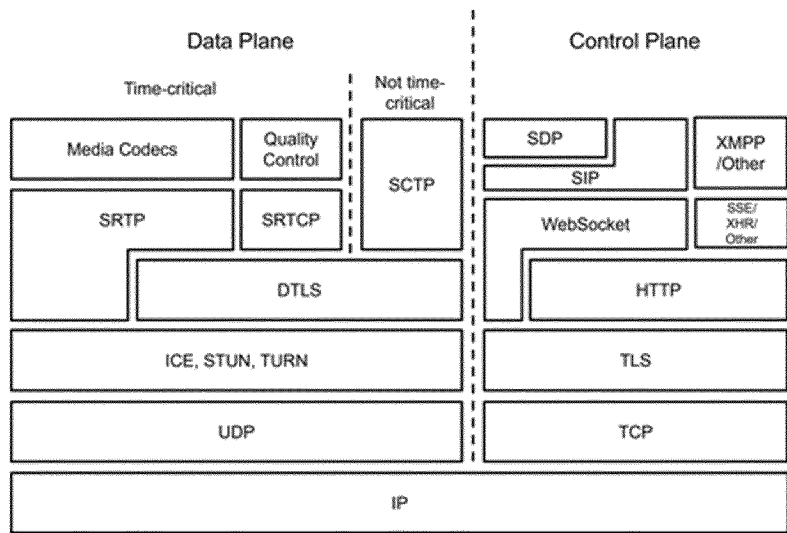


Figure 6

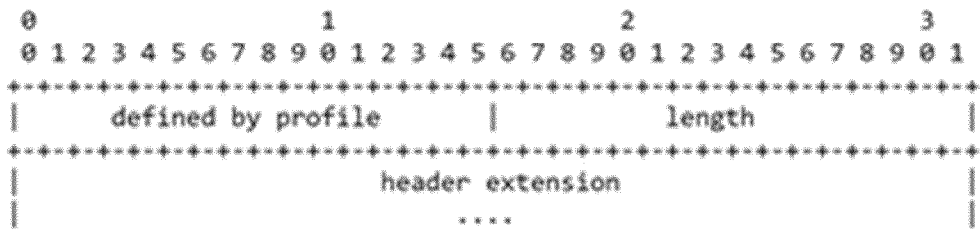


Figure 7

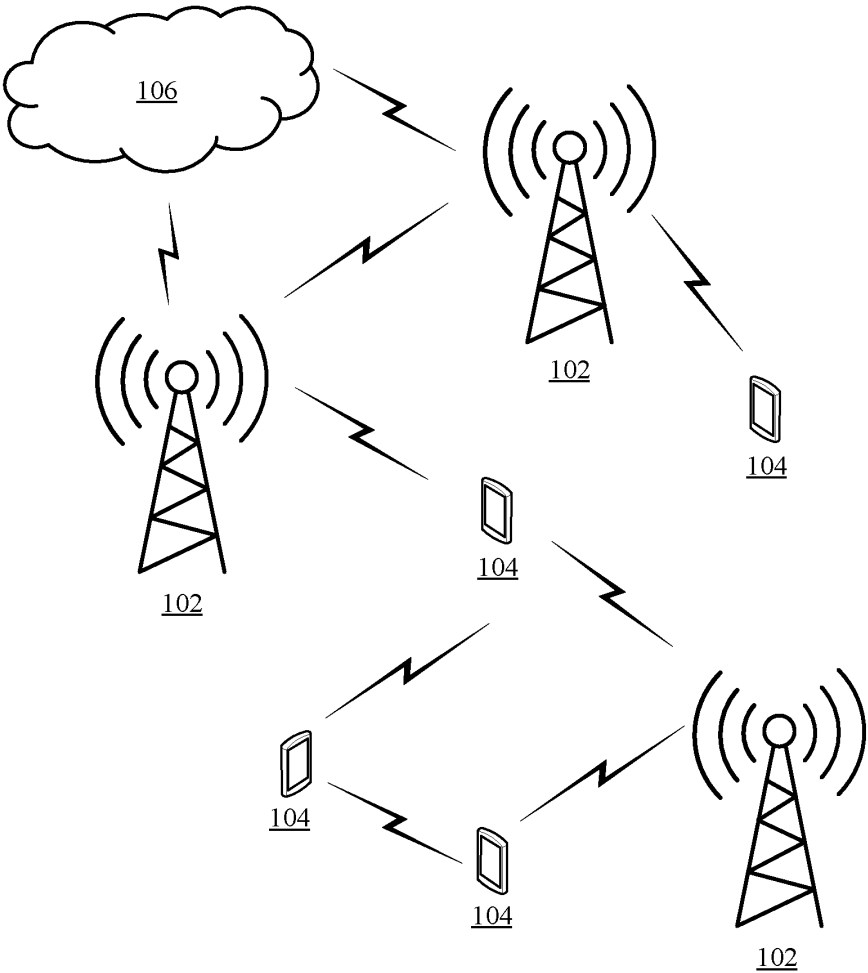


Figure 8

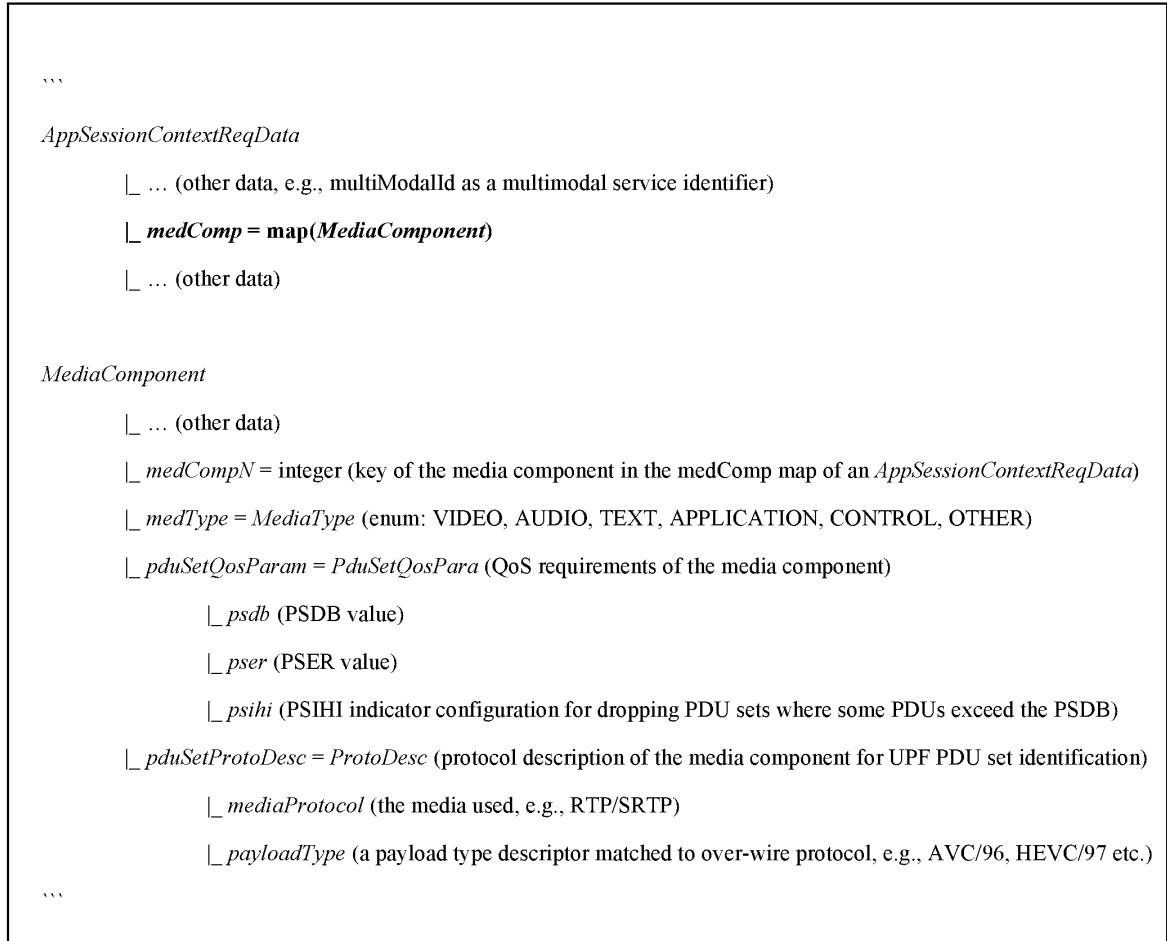


Figure 9

9/20

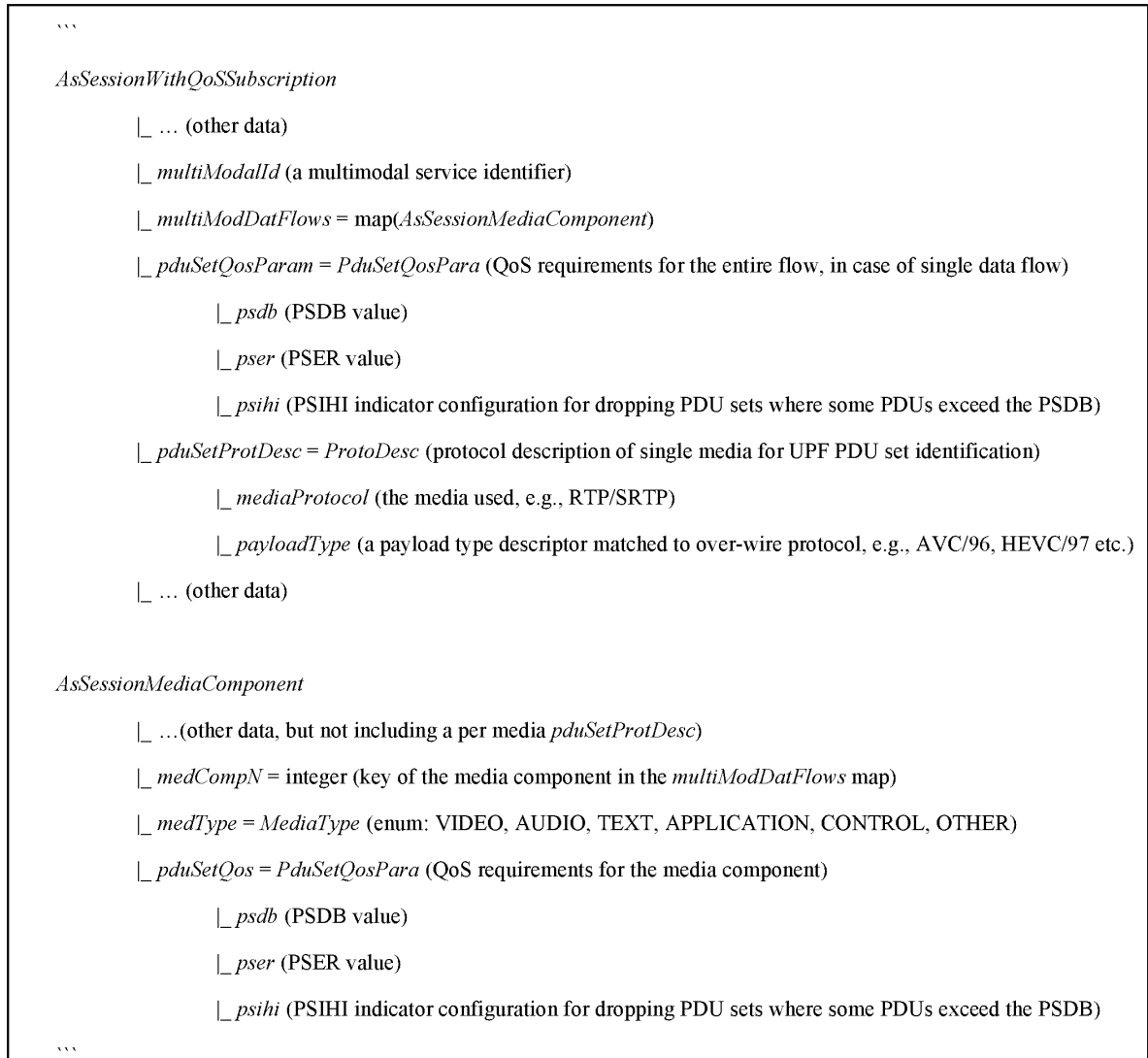


Figure 10

10/20

```
extmap-attr="a=extmap:" 1*5DIGIT ["/" direction] SP "urn:3gpp:pdus-marking:rel-18" SP extensionattributes
extensionattributes = *3(format / "pdu-set-size" / "end-of-burst")
format = "short" / "long"
```

Figure 11

```

...
AsSessionWithQoSSubscription
    _ ... (other data)
    _ multiModalId (a multimodal service identifier)
    _ multiModDatFlows = map(AsSession.MediaComponent)
    _ pduSetQoSParam = PduSetQoSPara (QoS requirements for the entire flow, in case of single data flow)
        _ psdb (PSDB value)
        _ pser (PSER value)
        _ psihi (PSIHI indicator configuration for dropping PDU sets where some PDUs exceed the PSDB)
    _ pduSetProtDesc = ProtoDesc (protocol description of single media for UPF PDU set identification)
        _ mediaProtocol (the media used, e.g., RTP/SRTP)
    Example: mediaProtocol (string) = "m=video 50000 RTP/AVP 96"
        _ payloadType (a payload type descriptor matched to over-wire protocol, e.g., AVC/96, HEVC/97 etc.)
    Example: payloadType (string) = "a=rtmap:96 H264/90000"
        _ pduSetMarking (protocol header extension information, e.g., RTP header extension SDP config)
    Example: pduSetMarking (string) = "a=extmap:1 sendonly urn:3gpp:pdu-set-marking:rel-18 short pdu-set-
size"
    _ ... (other data)

```

Figure 12

```

...

AsSessionWithQoSSubscription

    _ ... (other data)

    _multiModalId (a multimodal service identifier)

    _multiModDatFlows = map(AsSessionMediaComponent)

    _pduSetQosParam = PduSetQosPara (QoS requirements for the entire flow, in case of single data flow)

        _psdb (PSDB value)

        _pser (PSER value)

        _psihi (PSIHI indicator configuration for dropping PDU sets where some PDUs exceed the PSDB)

    _pduSetProtDesc = ProtoDesc (protocol description of single media for UPF PDU set identification)

        _mediaProtocol (the media used, e.g., RTP/SRTP)
→ Example: mediaProtocol (string) = "m=video 50000 RTP/AVP 96"
        _payloadType (a payload type descriptor matched to over-wire protocol, e.g., AVC/96, HEVC/97 etc.)
→ Example: payloadType (string) = "a=rtmap:96 H264/90000"
    _pduSetMarking = PduSetMarking (protocol header extension information, e.g., RTP header extension
SDP config)

        _localId (header extension ID over the wire as negotiated over SDP)

        _version (syntax and semantics of RTP header extension, e.g., "urn:3gpp:pdu-set-
marking:rel18")

        _format ("short" or "long" as per SDP RFC 8285)

        _pduSetSizeActive (indicates PSSize information is available)

        _eodbActive (indicates that end of data burst is actively marked by the RTP sender)
→ Example: pduSetMarking
    ▪ localId = 1
    ▪ version = urn:3gpp:pdu-set-marking:rel18
    ▪ format = short
    ▪ pduSetSizeActive = true
    ▪ eodbActive = false
    _ ... (other data)

...

```

Figure 13

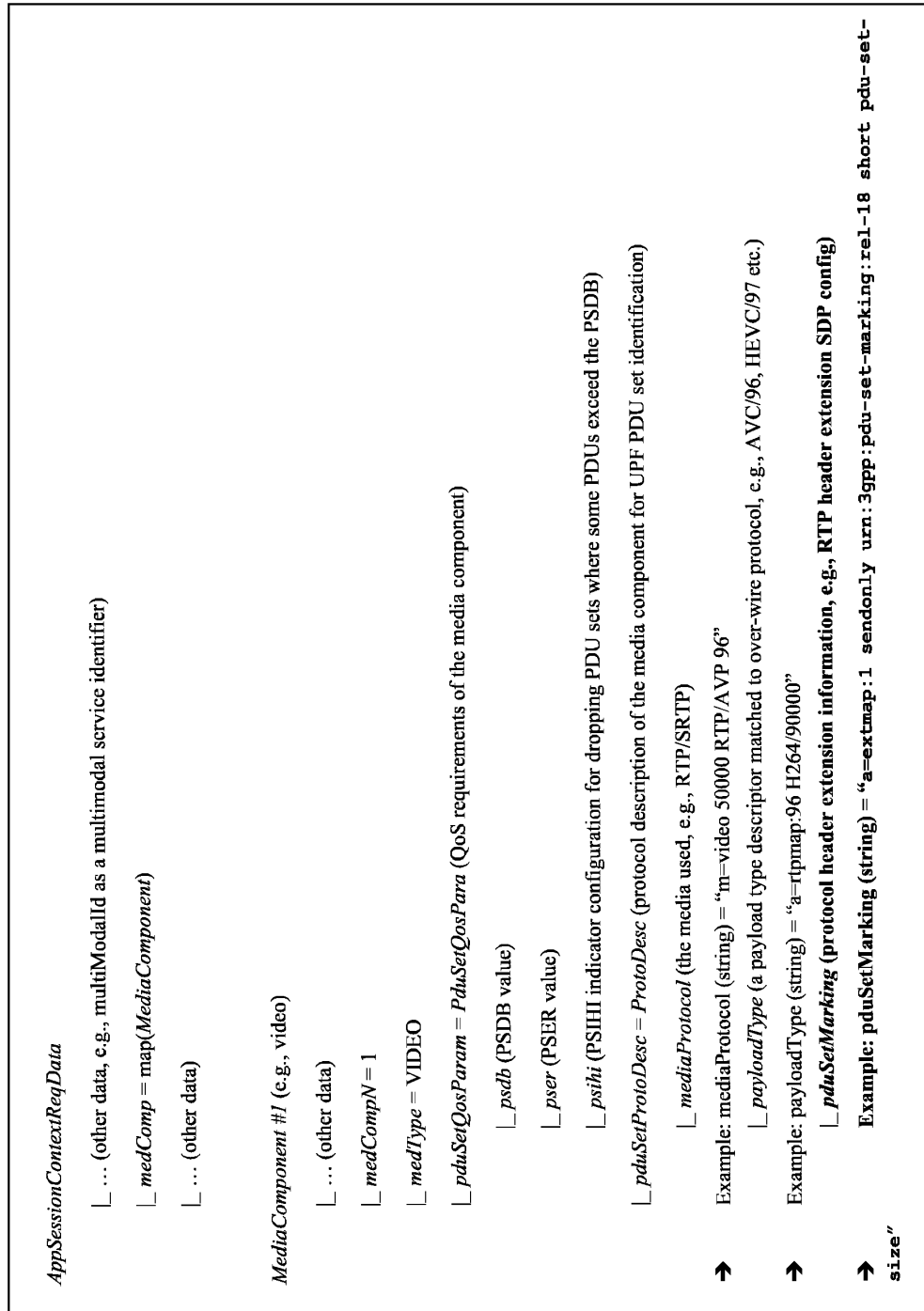


Figure 14

```

...

AppSessionContextReqData
    |_ ... (other data, e.g., multiModalId as a multimodal service identifier)
    |_ medComp = map(MediaComponent)
    |_ ... (other data)

MediaComponent #1 (e.g., video)
    |_ ... (other data)
    |_ medCompN = 1
    |_ medType = VIDEO
    |_ pduSetQosParam = PduSetQosPara (QoS requirements of the media component)
        |_ psdb (PSDB value)
        |_ pser (PSER value)
        |_ psihi (PSIHI indicator configuration for dropping PDU sets where some PDUs exceed the PSDB)
    |_ pduSetProtoDesc = ProtoDesc (protocol description of the media component for UPF PDU set identification)
        |_ mediaProtocol (the media used, e.g., RTP/SRTP)
        |_ payloadType (a payload type descriptor matched to over-wire protocol, e.g., AVC/96, HEVC/97 etc.)
    |_ pduSetMarking = PduSetMarking (protocol header extension information, e.g., RTP header extension SDP
config)
        |_ localId (header extension ID over the wire as negotiated over SDP)
        |_ version (syntax and semantics of RTP header extension, e.g., "urn:3gpp:pdu-set-marking:rel18" )
        |_ format ("short" or "long" as per SDP RFC 8285)
        |_ pduSetSizeActive (indicates PSSize information is available)
        |_ eodbActive (indicates that end of data burst is actively marked by the RTP sender)
➔ Example: pduSetMarking
▪ localId = 1
▪ version = urn:3gpp:pdu-set-marking:rel18
▪ format = short
▪ pduSetSizeActive = true
▪ eodbActive = false
    |_ ... (other data)
...

```

Figure 15

```

└─ pduSetProtoDesc = ProtoDesc (protocol description of the media component for UPF PDU set identification)
    └─ mediaProtocol (the media used, e.g., RTP/SRTP)
        Example: mediaProtocol (string) = "m=video 50000 RTP/AVP 96"
    └─ payloadType (a payload type descriptor matched to over-wire protocol, e.g., AVC/96, HEVC/97 etc.)
        Example: payloadType (string) = "a=rtmap:96 H264/90000"
    └─ pduSetMarking (protocol header extension information, e.g., RTP header extension SDP config)
        Example: pduSetMarking (string) = "a=extmap:1 sendonly urn:3gpp:pdu-set-marking:rel-18 short pdu-set-size"
    └─ originIP (description of the origin, i.e., the session originator/SDP offeror, IP version for the session)
        Example IPv4: originIP (string) = "0=rtcuser 2890844526 2890842807 IN IP4 164.252.132.63"
        Example IPv6: originIP (string) = "0=rtcuser 2890844526 2890842807 IN IP6 82df:baa2:4fc5:cd23:35d4:48ab:e46f:4117"

```

Figure 16

```

...
    | _ pduSetMarking = PduSetMarking (protocol header extension information, e.g., RTP header extension
SDP config)
        | _ localId (header extension ID over the wire as negotiated over SDP)
        | _ version (syntax and semantics of RTP header extension, e.g., "urn:3gpp:pdu-set-marking:rel18" )
        | _ format ("short" or "long" as per SDP RFC 8285)
        | _ pduSetSizeActive (indicates PSize information is available)
        | _ originIPv4 (indicates if origin IP is of type IPv4 or not)
        | _ eodbActive (indicates that end of data burst is actively marked by the RTP sender)
→   Example IPv4: pduSetMarking
    ▪   localId = 1
    ▪   version = urn:3gpp:pdu-set-marking:rel18
    ▪   format = short
    ▪   pduSetSizeActive = true
    ▪   originIPv4 = true (or alternatively, originIPv6 = false)
    ▪   eodbActive = false
→   Example IPv6: pduSetMarking
    ▪   localId = 1
    ▪   version = urn:3gpp:pdu-set-marking:rel18
    ▪   format = short
    ▪   pduSetSizeActive = true
    ▪   originIPv4 = false (or alternatively, originIPv6 = true)
    ▪   eodbActive = false
...

```

Figure 17

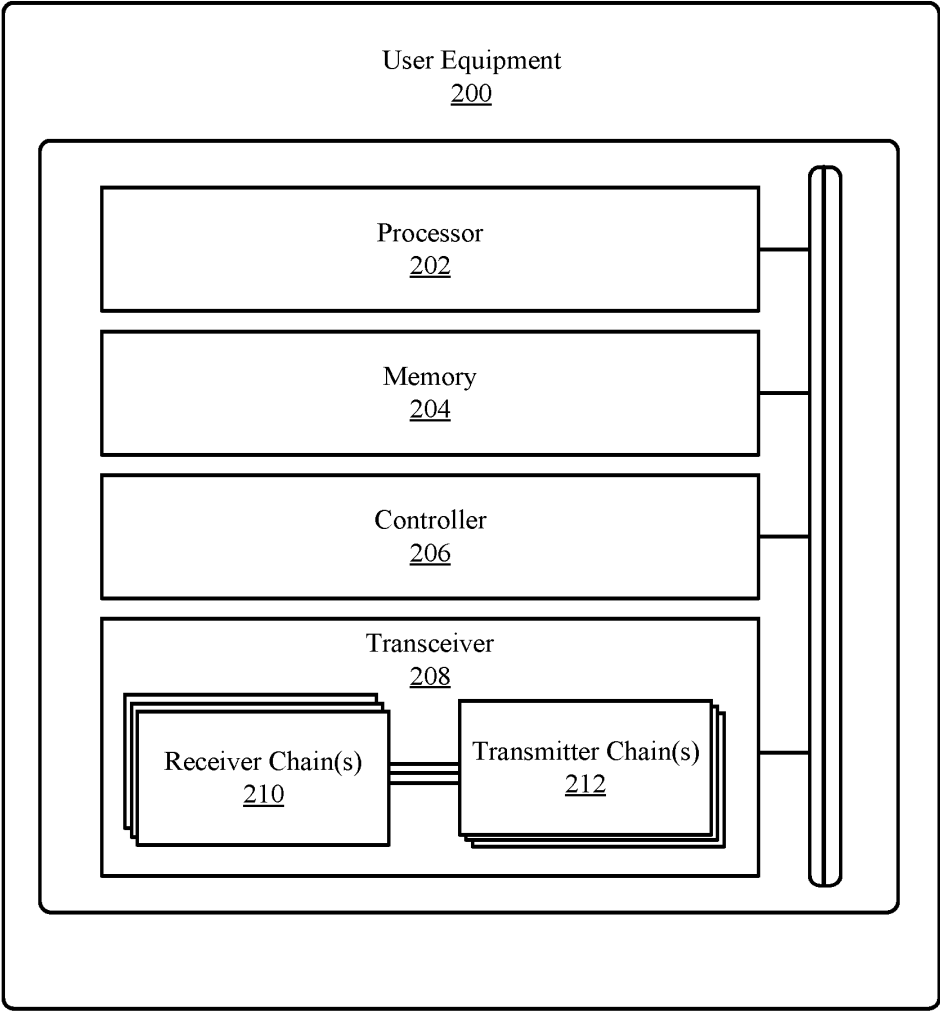


Figure 18

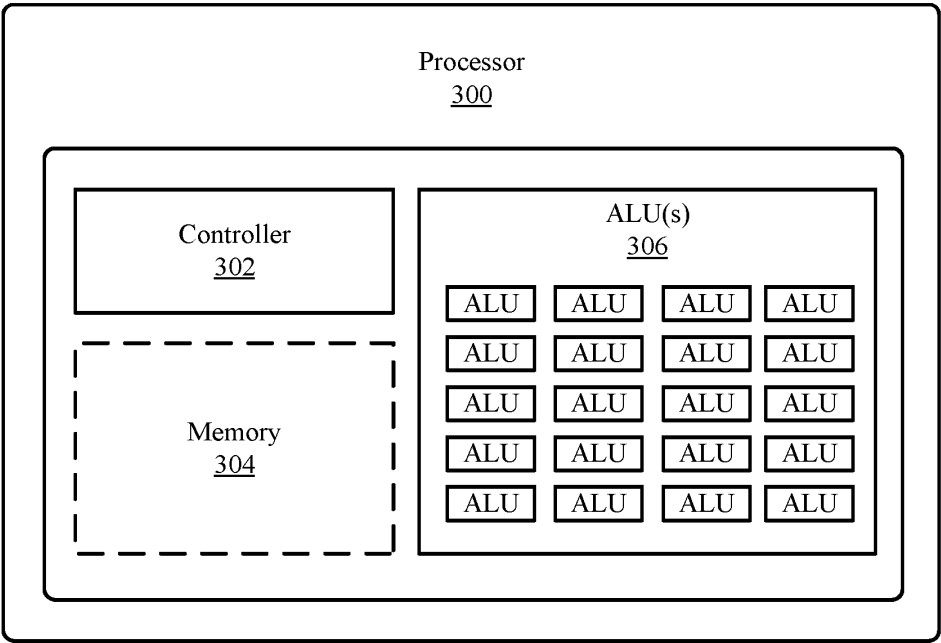


Figure 19

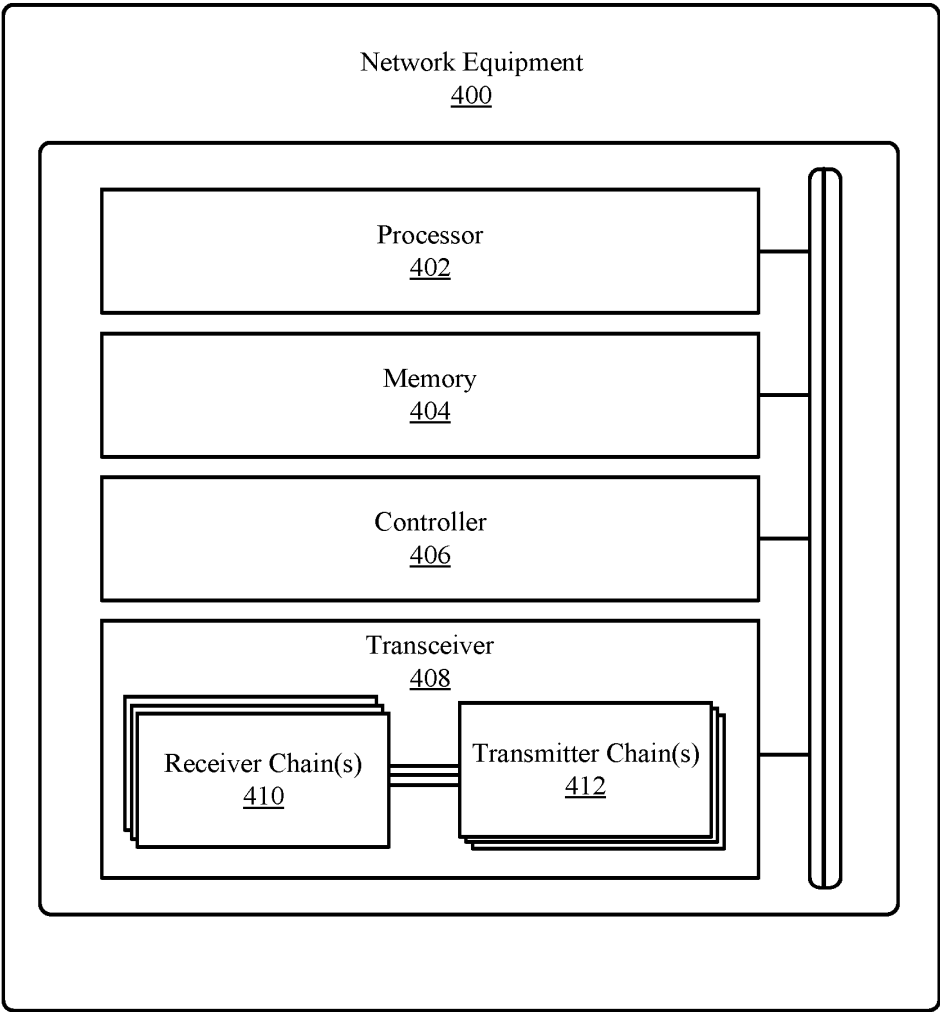


Figure 20

20/20

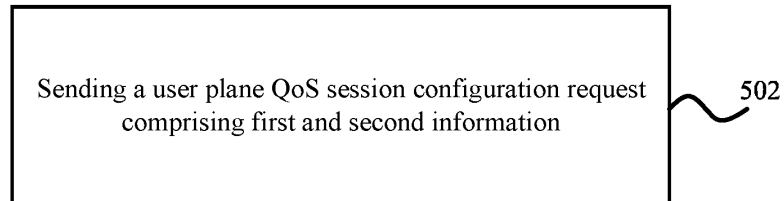


Figure 21

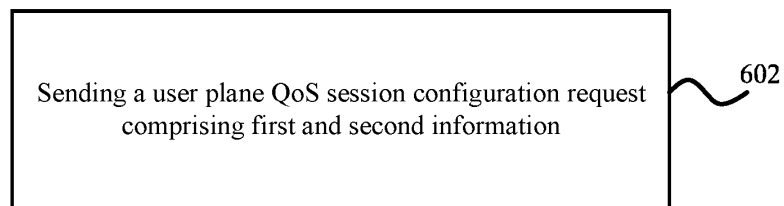


Figure 22