

Considerations with WebRTC in Mobile Networks

draft-reddy-rtcweb-mobile-02

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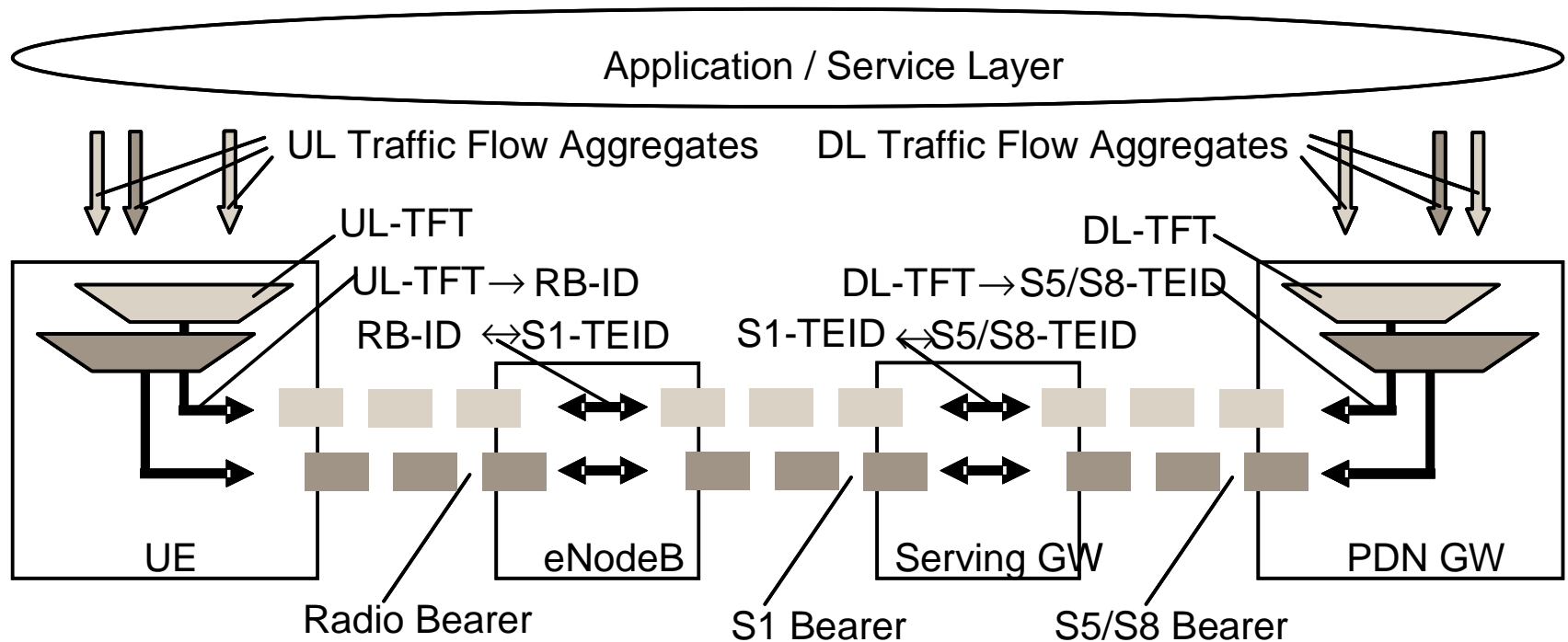
Agenda

- Overview of in draft-reddy-rtcweb-mobile.
- Discuss the issues mentioned in draft
- Next Steps

Introduction – Scope of this draft

- This draft looks at following aspects of webRTC from mobile networks perspective:
 - webRTC QoS in cellular networks
 - Mobility in Cellular networks

LTE Bearers - QOS



3gpp 23.401 Figure 4.7.2.2-1

- **Traffic Flow Templates (TFTs)** used to sort packets into bearers on the uplink (in the UE) and downlink (in the PGW)
- **TFT specifies flows** based on IP header fields (IP 5-tuple) and DSCP
- **Each APN** has a default bearer
- **Dedicated bearers** can be established on demand, typically initiated by the PCRF via an application interface (Rx).

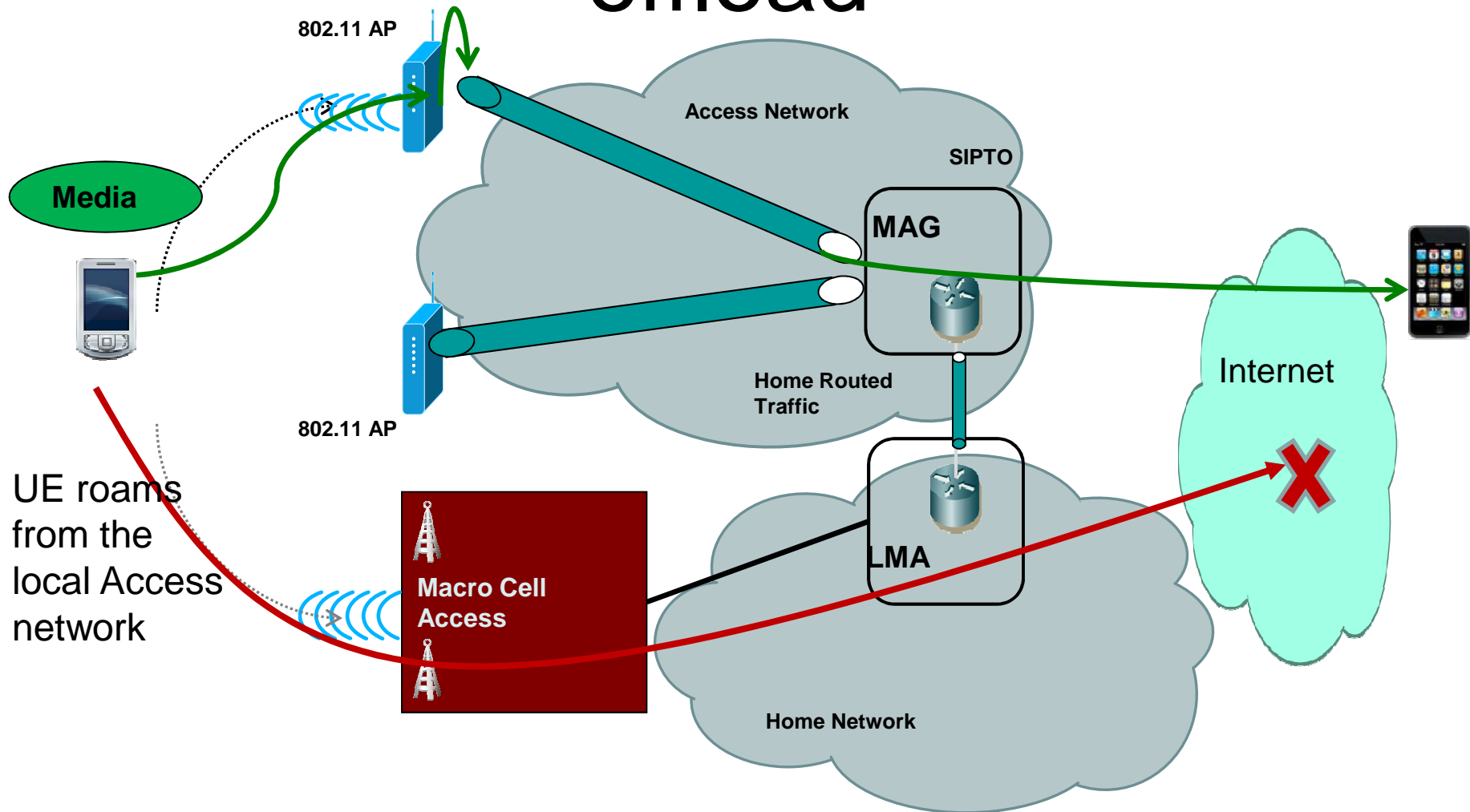
Problems with Multiplexing

1. DSCP values might not be preserved across the remote peer's network, over the Internet, and into the local carrier's network.
2. OS limitations to set DSCP
3. TFT cannot currently distinguish between audio, video and data channels when multiplexed (if cannot use DSCP)

Possible Solutions

1. Disable Multiplexing
 2. Extend Packet Filter to include RTP SSRC
 3. Extend Packet Filter to include RTP Payload type
- RTCP packets should not receive priority lower than corresponding RTP streams
 - Consider compound RTCP packets
 - Data channels receive default for 5-tuple
 - Only the browser can offer relative priority among data channels due to encryption of SCTP

Proxy Mobile IPv6 – traffic offload



SIPTO – Selected IP Traffic Offload

- In 3GPP when traffic is offloaded at TOF
- If UE roams out of the coverage of RNC then it cannot reach the remote peer.
- Possible solutions to solve the problem - Mobility using ICE (MICE)

Next Steps

- Request for more reviews