IEEE 802 Emergency Services ECSG

DCN: es-ecsg-09-0008-00

Title: **ES Pre PAR Briefing to Working Groups**

Date Submitted: Nov. 16, 2009

Presented at: Atlanta 802 Plenary

Authors/Source: Geoff Thompson, Interdigital

Abstract: SG Status presentation to WGs

Presentation release statements

This document has been prepared to assist the IEEE 802 ES-ECSG. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.

The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modif cations thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802 or its subgoups.

The contributor is familiar with IEEE patent policy, as stated in Section 6 of the IEEE-SA Standards Board bylaws <http://standards.ieee.org/guides/bylaws/sect6-7.html#6>

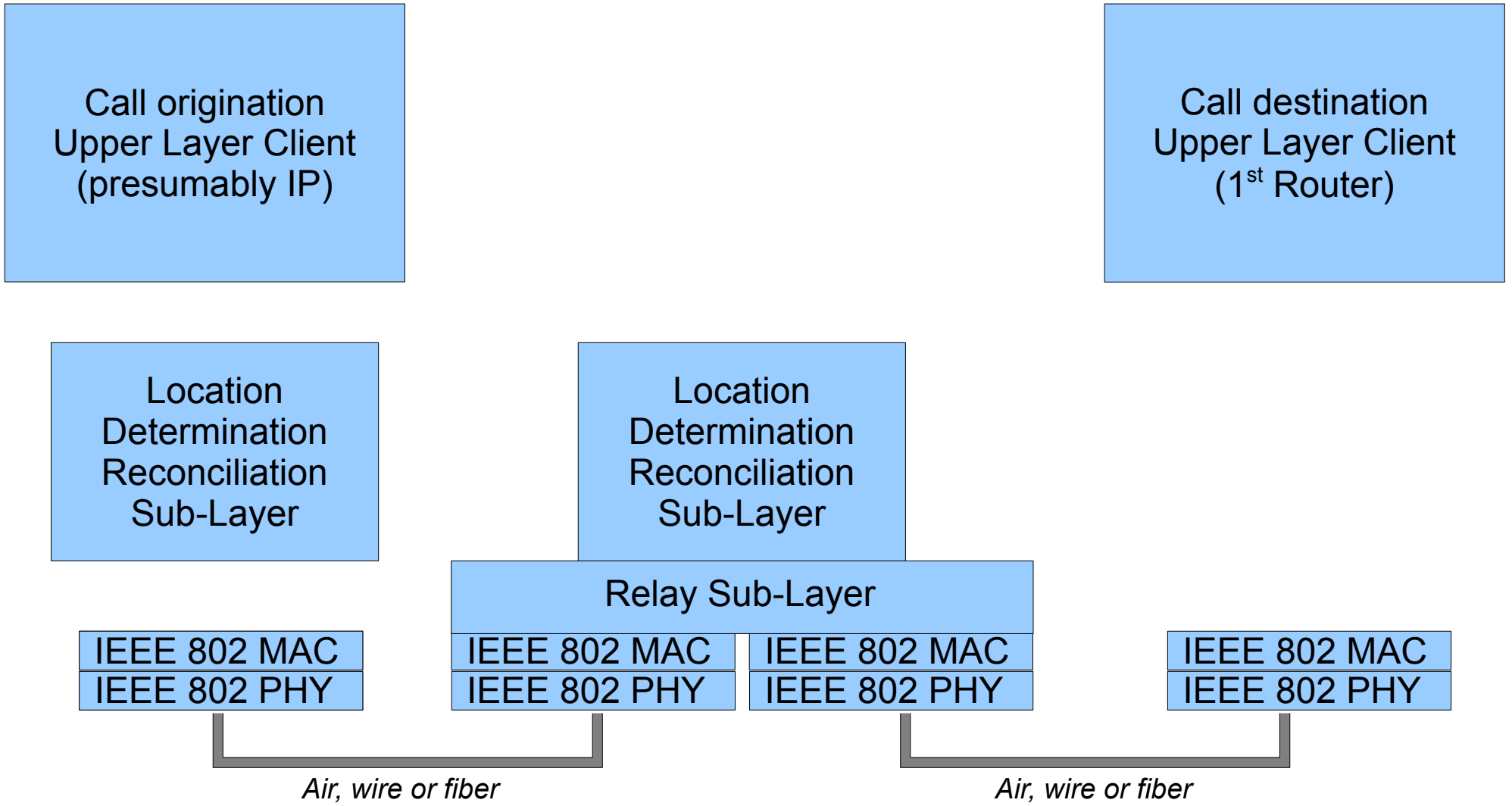
802 EMERGENCY SERVICES PRE-PAR BRIEFING

- 802 EMERGENCY SERVICE EC STUDY GRP
- CREATED BY EC AT END OF JULY MEETING
- TO DEVELOP ARCHITECTURE AND PLAN
- GEOFF THOMPSON, CHAIR

Major Tasks

- Satisfy legal requirements for E911 VoIP “calls” uniformly across 802 standards (equiv to cell)
- Work to IETF ECRIT as upper layer req'ts
- Big ticket tasks:
  - Call/Packet is identifiable as an “Emergency Call”
  - Goes to local call services @ 1st router (tunnel breakout)
  - Provide location information
  - Non-subscriber access

IEEE 802 EMERGENCY SERVICES ARCHITECTURE



Functions for 802 ES RSL (1)

- Follow ECRIT “calling endpoint” call model
- Present loc. info. to dest. Upper layers.
- Insert location information at source device
- Harmonize loc. info at source device (generate, store or transform)
- Detect ES call and provide “tunnel breakout”
- Provide whatever ES security that is necessary
- Provide Packet Type for ES
- Somehow assure that an IP address will be provided (requires upper layer support)

Functions for 802 ES RSL (2)

- Provide the same location information to non-emergency applications (with appropriate safeguards).
- LoST server access is a problem !!
  (If not a subscriber, foreign dial string is used & call is not yet identified as an ES call.)
- Accommodate both “wire database” and “calling endpoint” sourced location information.

Functions for 802 ES RSL (3)

- Determine and cache the location of the End Device in which it is embedded
  (per IETF ECRIT: 6.2, 6.3):
  - From locally provided facilities such as GPS, configuration data, etc.
  - As gathered and computed from network information
- Expected location format is LLDP per 6.5

Major Problem for 802 ES RSL

- End stations MUST know their location (per IETF ECRIT & ECRIT phone-bcp) before call initiation.
  - Difficult to guarantee this for non-subscribers.
  - Result is that best location info for non-subscribers may well be access/attachment point location.

Major Tasks (takeaway list)

- Satisfy legal requirements for E911 VoIP “calls” uniformly across 802 standards
- Work to IETF ECRIT as upper layer req'ts
- Big ticket tasks:
  - Call/Packet is identifiable as an “Emergency Call”
  - Goes to local call services @ 1st router (tunnel breakout)
  - Provide location information
  - Non-subscriber access

802 Emergency Services ECSG

- PAR to be presented for approval in March
- We meet T/W/Th in “Vinings” room (Conf level)
- We need participation !!
- Reflector: ecsg-802-emergencyservices
- Web site: http://grouper.ieee.org/groups/802/ecsg/
- Chair: Geoff Thompson <thompson@ieee.org>
- Next interim co-loc w/ 802.16, La Jolla (1/11/10)

THANK YOU!!