# Contents of this presentation

- PAR material (Title, Scope, Purpose)
  - Material as developed at previous meetings and approved at La Jolla 1/14/2010
- 802 Five Criteria
  - Material as developed at previous meetings, revised and approved at La Jolla, 1/12-14/2010

# (Draft) PAR Title

2.1 Title: Standard for Local and Metropolitan Area Networks-

Emergency Services for Internet Protocol (IP) Based Citizen to Authority

#### Communications

Motion: Approve above PAR title

Mover: Henderson Second: Moskowitz

# (Draft) PAR Scope



 This standard will define a mechanism that supports compliance within IEEE 802 to applicable civil authority requirements for citizen-to-authority emergency services packet data communications. Specifically, it supports the need for consistent data that is required for citizen-to-authority emergency services packet data encoded session initiation requests.



A new MAC or PHY is outside the scope of this effort.

Motion: Approve above SCOPE

Mover: Henderson Second: Moskowitz

Vote: Yes: 6 No: 0 Abstain: 0 PASS

## (Draft) PAR Purpose

The purpose of this standard is to support compliance to civil authority requirements complementary to IETF ECRIT specifications for citizen to authority emergency services functionality. This standard intends to encompass voice, data and multi-media requests across IEEE 802 using a new Layer 2 entity and associated behaviors and provide a uniform Structure of Management Information (SMI) for transferring required data for emergency services requests.

Motion: Approve above PAR purpose

Mover: Henderson Second: Moskowitz

# 802 Five Criteria (ref: LMSC OM 081114, Cl. 11.5)

- 1. Broad Market Potential
- 2. Compatibility
- 3. Distinct Identity
- 4. Technical Feasibility
  - 4.1. Coexistence of 802 wireless standards specifying devices for unlicensed operation
- 5. Economic Feasibility

## 802 Criteria: 1-Broad Market Potential

#### OM Requirements:

A standards project authorized by IEEE 802 shall have a broad market potential. Specifically, it shall have the potential for:

- a) Broad sets of applicability.
- b) Multiple vendors and numerous users.
- c) Balanced costs (LAN versus attached stations).

## 802 Criteria: 1-Broad Market Potential

- a) 802 networks could be called upon to support emergency services requests. An IEEE 802 Emergency Services standard would be applicable to all such 802 wireless and wireline networks and mixtures thereof.
- b) This standard is needed to comply with existing and forthcoming multinational regulatory requirements for those 802 networks described above.
  - This standard will be extensible to enable support of emerging requirements for next generation emergency services. Next generation emergency services requirements are being generated by the emergency services operators and SDOs in concert with government authorities.
- c) Implementation of changes required by this standard will affect both end and relay devices in a balanced manner.

Motion: Approve Criteria 1

Mover: Henderson Second: Moskowitz

## 802 Criteria: 2-Compatibility

#### OM Requirements:

IEEE 802 defines a family of standards. All standards should be in conformance with the IEEE 802.1 Architecture, Management, and Interworking documents as follows: IEEE 802. Overview and Architecture, IEEE 802.1D, IEEE 802.1Q, and parts of IEEE 802.1F. If any variances in conformance emerge, they shall be thoroughly disclosed and reviewed with IEEE 802.1.

Each standard in the IEEE 802 family of standards shall include a definition of managed objects that are compatible with systems management standards.

## 802 Criteria: 2-Compatibility

→ Managed objects will be defined in a manner that is consistent with existing policies and practices for 802.1 standards.

Consideration will be made to ensure compatibility with the 802 architectural model including at least 802, 802.2, 802.1D, 802.1Q, and 802.1X.

Consideration will be made to ensure that compatibility is maintained with 802 security mechanisms. Some adaptations may be needed to meet regulatory requirements and thus will need a thorough cross-802 security considerations review.

There may be a minor amendment to 802.1Q required that is anticipated to be fully aligned the existing architecture.

Motion: Approve Criteria 2

Mover: Henderson Second: Moskowitz

## 802 Criteria: 3-Distinct Identity

#### OM Requirements:

Each IEEE 802 standard shall have a distinct identity. To achieve this, each authorized project shall be:

- a) Substantially different from other IEEE 802 standards.
- b) One unique solution per problem (not two solutions to a problem).
- c) Easy for the document reader to select the relevant specification.

## 802 Criteria: 3-Distinct Identity

- a) There is no single standard that provides Emergency Services citizen-to-authority calling support and location information for all of IEEE 802.
  - Existing IEEE 802 standards provide some of the individual capabilities required to meet emergency services functionality (e.g. location, connection integrity). However, current implementations are inconsistent and do not provide all of the expected capabilities.
- b) The need for a unique and consistent IEEE 802 solution for emergency calls is driven by insufficient functionality for VoIP (and emerging technology) based citizen-to-authority emergency calls across current IEEE 802 data link standards.
- c) This standard by its title will be identified as the consistent and unique IEEE 802 definition of capabilities to support citizen-to-authority emergency calls.

Motion: Approve Criteria 3

Mover: Henderson Second: Moskowitz

## 802 Criteria: 4-Technical Feasibility

#### **OM Requirements:**

For a project to be authorized, it shall be able to show its technical feasibility.

At a minimum, the proposed project shall show:

- a) Demonstrated system feasibility.
- b) Proven technology, reasonable testing.
- c) Confidence in reliability.

## 802 Criteria: 4-Technical Feasibility

- a) The IEEE 802 portions of the functionality have been demonstrated in existing IEEE 802 standards (.1, .11, 16). There are other portions of the system functionality whose technical feasibility is outside our scope but IEEE 802 needs to provide the underlying support functions with understood existing mechanisms.
- b) This project would reuse and harmonize existing IEEE 802 functionality and utilize extensions to existing and proven IEEE 802 functionality to provide full and consistent implementation of citizento-authority emergency services capabilities.
- c) Existing IEEE 802 functions are tested and in service in commercial networks leading to a high confidence in those parts of the solution.

Motion: Approve Criteria 4

Mover: Henderson Second: Moskowitz

### 802 Criteria: 4.1-Wireless Coexistence

#### **OM Requirements:**

Coexistence of 802 wireless standards specifying devices for unlicensed operation

- A WG proposing a wireless project is required to demonstrate coexistence through the preparation of a Coexistence Assurance (CA) document unless it is not applicable.
- The WG will create a CA document as part of the WG balloting process.
- If the WG elects not to create a CA document, it will explain to the Sponsor the reason the CA document is not applicable.

## 802 Criteria: 4.1-Wireless Coexistence

- The ES-ECSG believes that a Coexistence Assurance document is not applicable to the proposed project as no new wireless signaling is being proposed.
- The SG believes there is no need to create a CA document as part of the WG balloting process.
- The SG believes that the above explanation should be sufficient.

Motion: Approve Criteria 4.1 response

Mover: Henderson Second: Moskowitz

## 802 Criteria: 5-Economic Feasibility

#### **OM Requirements:**

For a project to be authorized, it shall be able to show economic feasibility (so far as can reasonably be estimated) for its intended applications. At a minimum, the proposed project shall show:

- a) Known cost factors, reliable data.
- b) Reasonable cost for performance.
- c) Consideration of installation costs.

## 802 Criteria: 5-Economic Feasibility

- a) This project is equivalent to earlier projects in IEEE 802 which provided significant additional functionality for relatively small additions to firmware.
- b) See a.
- c) Installation of these features is consistent with normal software/firmware upgrades to a large portion of the installed base.

We believe that implementation of this standard will be a small part of the implementation of the total required solution set.

Motion: Approve Criteria 5

Mover: Henderson Second: Moskowitz