

# Review of the 5 Criteria

Howard Frazier  
Broadcom Corporation  
1-May-2009

# Outline

- Audience
- Purpose
- 5 Criteria
- Guidelines for responses
- Summary
- Successful examples

# Audience

- The 5 criteria are drafted and approved by a study group
- They are reviewed and approved (individually) by the working group
- They are subject to review and approval by each and every other working group in 802
- They are reviewed and approved by the 802 executive committee

# Purpose

- The 5 criteria are used to evaluate proposed projects
- They are used to filter out projects that are not appropriate for standardization in 802
- They are unique to 802
- They help perpetuate the “802 culture”

# The 5 Critters



Broad  
Market  
Potential



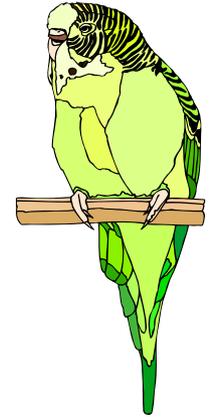
Compatibility



Distinct  
Identity



Technical  
Feasibility



Economic  
Feasibility



# Broad Market Potential

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



# Compatibility

- The criteria:
  - a) IEEE 802 defines a family of standards. All standards shall be in conformance with the IEEE 802.1 Architecture, Management, and Interworking documents as follows: 802. Overview and Architecture, 802.1D, 802.1Q, and parts of 802.1f. If any variances in conformance emerge, they shall be thoroughly disclosed and reviewed with 802.
  - b) Each standard in the IEEE 802 family of standards shall include a definition of managed objects that are compatible with systems management standards.
  - c) Compatibility with IEEE Standard 802.3
  - d) Conformance with the IEEE Std 802.3
  - e) Managed object definitions compatible with SNMP



# Distinct Identity

- The criteria:
  - 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
  - d) Substantially different from other 802.3 specifications/solutions



# Technical Feasibility

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



# Economic Feasibility

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

# Guidelines for responses

- Respond to each criteria on a separate slide
- Repeat the criteria verbatim at the top of each slide
- Respond to each point of the criteria

# Guidelines for responses

- Be prepared to defend every word of the responses
- Responses must be specific
- Responses must be succinct
- Responses must be honest
- A project must satisfy all 5 of the criteria simultaneously

# Summary

- The 5 criteria are an important output of a study group, along with the PAR and objectives
- Presentations should address the 5 criteria
- Be thorough and exercise due diligence

# Successful examples

- 802.3.1 Ethernet MIB definitions

- 802.3ba 40G/100G

[http://www.ieee802.org/3/ba/PAR/P802.3ba\\_5C\\_0908.pdf](http://www.ieee802.org/3/ba/PAR/P802.3ba_5C_0908.pdf)

- 802.3ah EFM

[http://www.ieee802.org/3/efm/public/jul01/presentations/par\\_1\\_0701.pdf](http://www.ieee802.org/3/efm/public/jul01/presentations/par_1_0701.pdf)

- 802.3ae 10 Gigabit Ethernet

<http://www.ieee802.org/3/ae/criteria.pdf>

- 802.3z Gigabit Ethernet

<http://www.ieee802.org/3/z/public/misc/5criteria.pdf>